

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 101115

TO: Ruixiang Li

Location: CM1/10D19/10E18

Art Unit: 1646

Wednesday, August 13, 2003

Case Serial Number: 09/727739

From: Edward Hart

Location: Biotech-Chem Library

CM1-6B02

Phone: 305-9203

edward.hart@uspto.gov

Search Notes

Examiner Li,

Here are the results of the search you requested.

Please feel free to contact me if you have any questions.

Edward Hart

ABSSPZ SEQID 2 & 16 Communicial DB's



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A_Geneseq_19Jun03:*

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GenCore version 5.1.6
(c) 1993 - 2003 Compugen Ltd
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Perfect score:
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SUMMARIES

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	y th Length DB	111	125	115	. 28	28	114	121	. 25	25
#	Query Match	100.0	93.9	91.2	868	8.68	72.8	72.8	71.4	71.4
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	in ana	tostat	tatin pept	Peptide hormone so		Mammalian somatost	Human somatostatin	tostatin r	atostatin-28	preprosomat	eprosomato	secreted	somatosta	-MWPmp20-(H1:	Tod AHIIQ u	duodenum ei	tatin re	tostatin ana	tostatin rela	ostatin-28	statin-28 p	ostatin-28 p	Ostatin-28	e or 10-1	statinzd p	tostatin-	Statin a	Somatostatin dilat	activety cay	Somatostatin-28	atin-28	Rainbow trout s	omatostatin-28	statin-28 an	omatostatin an		
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ALIGNMENTS

europrotectiv polypeptide. (PPSS-II Rainbow trout preprosomatostatin metastasis; gene t n immunodeficiency trout; somatostatin; PPSS-II'; endocri AAU07668 standard; Protein; entry) gastroenteropancreatic (first 04-DEC-2001 anti-human AAU07668; Rainbow t

Oncorhynchus mykiss

Location/Qualifiers	/note- "Signal peptide"	1.86 /note= "PPSS-II'' pre-sequence"	26111 /note= "Mature PPSS-II''"	8797 /note= "PPSS-II'' pro-sequence"	· 87111
Key		tein	Protein	Peptide	Peptide
		FT Protein FT	FT Prof		FT Pep

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(Updated on 16-AUG-2002 to add missing OS field.) (Updated on 25-MAR-2003 to correct PA field.)
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encoding them. The translation of som
precursor (prepro S1) containing a sign
released during the transit into the e
                                                                                                         /label Somatostatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  somatostatin and precursors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   50pp; English
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                                                                                                                                                                                                                                                         81EP-0303825
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tostatin 2 (S2).
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Alzheimer's
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                                                                                                                                                                                                                                                                                                      25-AUG-1980;
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anti-human
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epilepsy;
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Best Local
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PPSS-II'
                                                                         Key
Protein
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to an Oncorhynchus mykiss somatostatin polypeptide containing a portion of preprosomatostatin I (PPSS-I) and/or a portion of preprosomatostatin I (PPSS-II). The protein sequences and their associated polynucleotides are useful for identifying modified commatostatin polypeptide which functions as a somatostatin agonist useful conterinary applications. The wild-type somatostatin and its modified version are useful for treating hypersecretion from endocrine tumours in the pitulitary (e.g. acromedaly) or gastroenteropancreatic tissues (e.g. gastrinoma, glucagonoma, carcinoid syndrome), to cause tumour shrinkage critrough their effects on cell proliferation and apoptosis and as adjuncts in the treatment of diabetes mellitus via inhibition of growth hormone and glucagon. In addition, dysfunctional somatostatin secretion is ensociated with acquired immunodeficiency syndrome (AIDS) and various concursional disorders (e.g. epilepsy, Alzheimer's disease and treatment of such conditions. Nucleic acids encoding the polypeptides are treatment of such conditions. Nucleic acids encoding the polypeptides are treatment of such conditions. Nucleic acids encoding the polypeptides are cuseful in gene therapy and fusion peptides can be targeted to neoplasms and their metastases, inhibiting the release of their secretory products. This sequence represents O. Mykiss PPSS-II'' protein.

Cyc specification.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             New somatostatin polypeptides derived from Oncorhynchus for treating diabetes mellitus, acromegaly, gastrinoma, immunodeficiency syndrome and neurological disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Somatostatin; growth hormone; peptide hormone; secret
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match
Best Local Similarity 100.0%; Score 147; DB 22;
Best Local Similarity 100.0%; Pred. No. 2.1e-14;
Matches 25; Conservative 0; Mismatches 0;
96..97
/note- "Dibasic cleavage site"
98..111
/note- "SS-14 variant peptide"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52pp; English.
                                                                                                                                                                                                                                               99US-0168934.
                                                                                                                                                                                                          2000CA-2325169.
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(updated)
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                                                                                                                                                                                                                                                                                                   (NDSU-) NDSU RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-425997/46.
N-PSDB; AAS12935.
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  Cleavage-site
                                                                                                                                                                                                       01-DEC-2000;
                                                                                                                                                                                                                                                  03-DEC-1999;
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                                                                                                                CA2325169-A1
                                                                                                                                                              03-JUN-2001.
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16-AUG-2002
14-AUG-1992
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                                            Peptide
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tary gland; glucagonoma; AIDS; gastrinoma; diabetes mellitus;
                                       Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       anticonvulsant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nootropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                neurological
                                                                                                                                                                                                                                                                                                                                 polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ngton's disease;
antidiabetic; no
                                                                                                                                                                                                                                                                                                                                                                                                                              apoptosis;
                                                                                                                                                                                                                                                                                                                                                                      preprosomatostatin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         osteopathic;
                                                                                                                                                                                                                                                                                                                                 Rainbow trout preprosomatostatin II (PPSS-II')
Score 138; DB
Pred. No. 5.5e
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                               disease; Huntington
gene therapy; antid
                                                                                                                                                                                                                                                                                                                                                                                       PPSS-II'; PPSS-II'; endocrine tumour; p
gastroenteropancreatic tissue; acromega
carcinold syndrome; cell proliferation;
                                                                           SVDNLPPRERKAGCKNFYWKGFTSC 25
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                                                                                             AAU07667 standard; Protein; 115
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Length 125;

20-25

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of somatostatin mRNA yield a signal peptide which ma

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Angler fish somatostatin-28 and analogue and fragment inhibiting insulin secretion in insulinoma.
                                                                                                                                                                                                                                     Somatostatin-28; insulin-selective;
                                               AAP61714 standard, Protein;
                                                                                                                                                                                          Somatostatin-28 analogue.
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                                                                                                                                                                                                                                                                                                                   Key
Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-AUG-1984;
01-APR-1987;
                                                                                                                              25-MAR-2003
28-JUL-1991
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                                                                                                                                                                                                                                                                          Synthetic
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te polypeptides are
ted to neoplasms
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1, acquired
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to an Oncorhynchus mykiss somatosta containing a portion of preprosomatostatin I (PPSS-II) and preprosomatostatin II (PPSS-II). The protein sequences an associated polynucleotides are useful for identifying mod somatostatin polypeptide which functions as a somatostatin for research, therapeutics or diagnostics, including medior veterinary applications. The wild-type somatostatin and i version are useful for treating hypersecretion from endoc the pituitary (e.g. acromegaly) or gastroenteropancreatic gastrinoma, glucagonoma, carcinoid syndrome), to cause tunthrough their effects on cell proliferation and apoptosis in the treatment of diabetes mellitus via inhibition of gastrinotoms. In addition, dysfunctional somatostatin sec associated with acquired immunodeficiency syndrome (AIDS) neurological disorders (e.g. epilepsy, Alzheimer's diseas Huntington's disease) and somatostatin antagonists are effereatment of such conditions. Nucleic acids encoding the useful in gene therapy and fusion peptides can be targeted and their metastases, inhibiting the release of their second their sequence represents O. Mykiss PPSS-II' protein.

Note: The features for this sequence are specifically cla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New somatostatin polypeptides derived from Oncorhynchu
for treating diabetes mellitus, acromegaly, gastrinoms
immunodeficiency syndrome and neurological disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22;
                                                                             "PPSS-II' pre-sequence"
                                                                                                                                                                                                                                                              .101
.e- "Dibasic cleavage site"
                                                                                                                                                                                                                                                                                                       ...115
te= "SS-14 variant peptide"
                                                                                                                                                                    88.101
/note= "PPSS-II' pro-sequence'
88.115
/note= "Prosomatostatin II'"
100:.101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       th 91.2%; Score 134; DB 2; Similarity 95.7%; Pred. No. 2e-12; 22; Conservative 1; Mismatches
                                                                                         /note= "PPSS-11' pre-seq
26..115
/note= "Mature PPSS-II'"
74
                                      /note= "Signal peptide"
                                                                                                                                                                "Encoded by CAA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kittelson JD;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 2; Fig 3; 52pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000CA-2325169.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99us-0168934.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Moore CA,
                                                                                                                                                            /note=
88..101
                                                             1..87
/note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (NDSU-) NDSU RES FOUND.
                                                                                                                                                                                                                                                                                                                                /note=
                                                                                                                                                                                                                                                                                          /note=
102..11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-425997/46.
N-PSDB; AAS12934.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                115 AA;
                                                                                                                                         Misc-difference
                                                                                                                                                                                                                                                                   Cleavage-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Note: The feat
specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sheridan MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                               03-JUN-2001.
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                         Protein
                                                                                                                                                                                   Peptide
                                                                                                                                                                                                                                                                                                             Peptide
                                                                                                   Protein
                                                                                                                                                                                                                               Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loc
Matches
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useful

Location/Qualifiers

/label- Hyl, Lys

selective analogue

English

INST. BIOLOGICAL

SALK

Noe BD;

84US-0646610. 87US-0033295.

85EP-0305867.

costatin-28, which is more pot somatostain-28 in inhibiting

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Length 28;
                                                                                    Indels
          correct PR field.)
                                                               DB
                                                                              Mismatches
                                                               Score 132;
Pred. No.
                                                                                                                                                                                                                                                           anglerfish somatostatin 28
insulinoma
                                                                                                        SVDNLPPRERKAGCKNFYWKGFTSC
                                                                                                                     Z
                                                                                                                                                                                  58
                                                             89.8%;
                                                                                                                                                           RESULT 5
AAP90989
ID AAP90989 standard; peptide;
                                                                                                                                                                                                                           (updated)
(first entry)
                                                                        Similarity 88.0
22; Conservative
          (Updated on 25-MAR-2003 (Updated on 25-MAR-2003
                                                                                                                                                                                                                                                                                Somatostatin
inhibitor; in
                                                                                                                                                                                                                                                            Analogue of
                                                                                                                                                                                                                            25-MAR-2003
08-JUN-1990
                                                                                                                                                                                                     AAP90989;
                                          Sequence
                                                              Query Match
Best Local
                                                                         Best Loc
Matches
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Inde

3 DNLPPRERKAGCKNFYWKGFTSC 25

ò

<u>В</u>

93 NNLPPRERKAGCKNFYWKGFTSC

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AAP20028 standard; Protein; 121
          Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         useful
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 7
AAP20028
ID AAP2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 is useful
aSS-28 may
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  omatostati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypersecretion; PPSS-I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         It is called ass-28 because it is an analogue of angle (SS-28). It is more potent than either somatostatin 14 at inhibiting insulin secretion for the treatment of 114-residue C-terminal peptide is also claimed (ass-14) for inhibiting insulin secretion by the pancreas. assbe useful for decreasing gastric acid secretion and in thermoregulation. Their reduced linear forms, wherein bridge is not present and is replaced by H, is also cl (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rainbow trout; somatostatin; preprosomatostatin; hyper PPSS-II'; endocrine tumour; pitultary gland; gastroenteropancreatic tissue; acromegaly; gastrinoma; carcinoid syndrome; cell proliferation; apoptosis; groglucagon; acquired immunodeficiency syndrome; neurolog epilepsy; Alzheimer's disease; Huntington's disease; neoplasm; metastasis; gene therapy; antidiabetic; noot anti-human immunodeficiency virus; osteopathic; antico
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Inde
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rainbow trout preprosomatostatin I (PPSS-I) polypeptid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    fish somatostatin-28 and fragments - in inhibiting insulin secretion and insulinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 132; DB 10;
Pred. No. 9.4e-13;
1; Mismatches 2
                          /note="Bonded to Cys-28"
28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25
                                                                                                                                   15..28 /note="Also claimed"
                                                                                                                                                                                                                                                                                                                                                           (SALK ) SALK INST BIOLOGICAL STUDIES
Location/Qualifiers
17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         114 AA.
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                                                                              'note="Bonded to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; page 65; 8pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             89.88;
                                                                                                                  /label-Lys,
                                                                                                                                                                                                                                                                87US-0033295
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84US-0646610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAU07666 standard; Protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1989-113910/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oncorhynchus mykiss.
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15.
                                                                                                                                                                                                                                                                                                                                                                                               Noe BD;
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                                                                                               Misc-difference
         Key
Disulfide-bond
                                                            Disulfide-bond
                                                                                                                                                                                                                                                                                                   01-APR-1987;
31-AUG-1984;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     fish
                                                                                                                                                                                        US4816438-A
                                                                                                                                                                                                                             28-MAR-1989
                                                                                                                                                                                                                                                                 01-APR-1987
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                                                                                                                                                                                                                                                                                                                                                                                            Spiess J,
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Best Local &
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useful
                                                                                                                                    Region
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Matches
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in polypeptide for a portion of their
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sues (e.g.
shrinkage
las adjuncts
th hormone
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acquired
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         apoptosis and a tion of growth
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 noun
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a somatostatin acincluding medical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                           New somatostatin polypeptides derived from Oncorhynchus for treating diabetes mellitus, acromegaly, gastrinoma, immunodeficiency syndrome and neurological disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                 (PPSS-I) a
sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cause
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    somatostatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for identifying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acromegaly) or gastroenteropancre onoma, carcinoid syndrome), to causets on cell proliferation and apopt diabetes mellitus via inhibition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   polypeptide which functions as a somatc, therapeutics or diagnostics, including pplications. The wild-type somatostatin useful for treating hypersecretion from
                                                                                                                                                                                                                                                                                                                                                                                                                                      to an Oncorhynchus mykiss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ore 107; DB 22; d. No. 2.4e-08; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ddition, dysfunctional quired immunodeficienc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 107;
Pred. No.
"Signal peptide"
                                                                                                                                               SS-14 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence
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(PPSS-II). T
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100
-- "Dibasic c
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..114
...*Mature
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.ppss-I
                      I-SSdd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                72.8%;
                                                                                                                                                                                                                                               99US-0168934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 85.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              applications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        represents
                                                                                   114
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                                                                                                                                                                                                                                                                                                Moore CA,
                                                                                                                                                                                                                                                                       RES FOUND.
                                                                    'note-
                                                                                    .11
/note=
99
                                         /note-
89
note
                          note
                                                                                                                                                                                                                                                                                                                                                                                                            2; 52pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                     relates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              eurological disorder
untington's disease)
                                                                                                                                                                                                                                                                                                                      2001-425997/46..
B; AAS12933.
                                                                                                                                                                                                                                                                                                                                                                                                                                                containing a portion
preprosomatostatin I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         114 AA;
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Note: The feat
                                                                                                                                                                                                                                                                                                                                                                                                                                     invention
                                                                                                           Cleavage-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               specification
                                                                                                                                                                                                                                                                                                                                                                                                           Fig
                                                                                                                                                                                                                                                                         (NDSU-) NDSU
                                                                                                                                                                        CA2325169-A1
                                                                                                                                                                                                                      01-DEC-2000;
                                                                                                                                                                                                                                               03-DEC-1999;
                                                                                                                                                                                                                                                                                                 Sheridan MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        are
                                                                                                                                                                                               03-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            veterinary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                   Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hrough
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            Protein
                                    Protein
                                                           Peptide
                                                                                   Peptide
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tion;
amino;
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group; amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ))-SS-28
                                                                                                                                                                                                                                                                                                                                                                                               of
                                                                                                                                                                                                                                                                                                                                                                                              increased inhibition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   somatostati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               so inhibit
(D-Trp(22)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                srapeutic peptide; peptidase
ion; succinimidyl; maleimid
growth factor; neurofrance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ormone secretion.
on 16-AUG-2002 to add missing OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hey also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ulin and glucagon sectretion. (I substantial increases in potency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3,
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                                                                                                                                                                                                                                                                                                                                  Brazea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d. No. le-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Somatostatin related peptide SEQ ID NO:191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 105;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  potent
                                                                                                                                                                                                                                                                                                                                                                                              with
  growth hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pharmaceutical
                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Protection; endogenous therapeutic blood component; modification; succ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and
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                                                                                                                                                                                                                                                                                                                                Bohlen
                                                                                                                                                                                                                                                                                                                                                                                                                                         7pp; English
                                                                                                                                                                                                                                                                                                                                                                                            analogues
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                                                                                                                                                    C-0H
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                                                                                                     H-S
                                                                                                                                                                                                                                                                      80US-0159801
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Best Local Similarity 81.0%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB91017 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     blood component; modifica
hydroxyl; thiol; hormone;
                                                                                                                                                                                                                                                                                                   SALK INST BIOLOG
                                                                                                    /label=
14..25
                                                                                                                                                                                                                                                                                                                                Esch FS,
                                                                                                                                                   /label-
Somatostatin; hormone;
                                                                                                                                                                                                                                                                                                                                                                                           somatostatin a
                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 6; Column 12;
                                                                                                                                                                                                                                                                                                                                                            WPI; 1982-19801E/10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25 AA;
                                                                                                                                                                                                                                                                                                                                                                                          Extended somato
growth hormone
                                                                                                                   Disulfide-bond Modified-site
                                                                                                                                                                                                                                                                                                                               Guillemin RCL,
                                                                       Key
Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200069900-A2
                                                                                                                                                                                                                                                                     14-JUN-1980;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           very
                                                                                                                                                                                                                                       14-JUN-1980;
                                                                                                                                                                                                           23-FEB-1982.
                                                                                                                                                                              US4316891-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-NOV-2000
                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB91017;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Updated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           exhibits
                                                                                                                                                                                                                                                                                                  (SALK-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            carboxy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               produced by transformed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The inventors claim preprosomatostatin-1, prosomatostatin-preprosomatostatin-2, prosomatostatin-2 and somatostatin-encoding them. The translation of somatostatin mRNA yiel precursor (prepro S1) containing a signal peptide which released during the transit into the endoplasmic reticulures unitant precursor (pro S1) is subsequently cleaved to yitself. The prepeptide portion of prepro S1 is probably bases long. Translation of plas2 predicts the sequence c peptide which surprisingly contains a 14 AA sequence at iterminus which differs from S1 by only 2 AAs, and is term Somatostatin 2 (S2).

(Updated on 16-AUG-2002 to add missing OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                       Somatostatin; growth hormone; peptide hormone; secret
                                                                                         Sequence of preprosomatostatin-1 encoded on pLaS1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      th 72.8%; Score 107; DB 3; 1 Similarity 85.7%; Pred. No. 2.6e-08; 18; Conservative 1; Mismatches 2;
                                                                                                                                                                                    Location/Qualifiers
108..121
/label = Somatostatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  somatostatin-25 analogue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pictet RL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New somatostatin and precursors microorganisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example; Fig 3; 50pp; English
                                                                                                                                                                                                                                                                                                           81EP-0303825.
                                 (updated)
(updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                        80US-0181046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAP20198 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                    (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                 Hobart P, Crawford R,
                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1982-18113E/10.
N-PSDB; AAN20033.
                                                                                                                                                         americanus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 AA;
                                                                                                                                                                                                                                                                                                                                      25-AUG-1980;
                               25-MAR-2003
16-AUG-2002
14-AUG-1992
                                                                                                                                                                                                                                                                                                          21-AUG-1981;
                                                                                                                                                                                                                                                                           03-MAR-1982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-AUG-2002
14-AUG-1992
                                                                                                                                                                                                                                            EP46669-A.
    AAP20028;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAP20198;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                        Lophius
                                                                                                                                                                                                 Protein
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Matches
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X222X2X

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Gaps

saition reduces associated risk

ischaemic bowel hypercoagulation lerance. The

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Length

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the risk factors of syndrome X of Reaven (hyperinsulinaemia syndrome). comprises somatostatin, diazoxide, cyclothiazide (or an analogue of one of these) or metformin as the active ingredient. The composition reduce resistance to insulin, and so treats and prevents all the associated rifactors at once. The risk factors are hypertension, dyslipidaemia (raised triglyceride and LDL levels with reduced HDL levels), shorter coagulation time due to increased Plasminogen Activator Inhibitor-1 levels, core obesity, glucose intolerance hyperinsulinaemia. The composition reduces the incidence of ischaemic heart disease,
                                                                                                                                                                                cyclothiazide (or an analogue cyclothiazide. The composition
                                                                  Composition for treatment of the risk factors of syndrome X of Reaven - (hyperinsulinaemia syndrome) comprises somatostatin, diazoxide, cyclothiazide (or their analogues) and/or metformin
                                                                                                                                                                        composition for
                                                                                                                                                                                                                                                                                                                                                            pheral vascular disease,
obesity and glucose into
specifically claimed som
                                                                                                                                                                                                                                                                                                                                                                                                                                                               105; DB 19;
No. 1.1e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SS-28 hormone; growth hor hormone; octreotide; ce insulin secretion; SSTRV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                            impotence due to peripheral
lal veln thrombosis), obesit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25
                                                                                                                                         English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SS-28 hormone
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             71.4%;
81.0%;
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98US-0071193.
98US-0071209.
98US-0072556.
                                                                                                                                                                                                                                                                                                                                                                                              sequence represents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             receptor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard; peptide;
                                                                                                                                                                                                                                                                                                                                            cerebrovascular disorders,
disease, impotence due to p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entry)
                                                                                                                                      45pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                          The invention relates to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      thyroid stimulating glucose-stimulated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first
                                       WPI; 1998-271636/24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-444195/37
                                                                                                                                         41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mouse somatostatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mouse somatostatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                A.
                                                                                                                                         Claim 42; Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09935242-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-JUN-1998;
12-JAN-1998;
12-JAN-1998;
03-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-JUL-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New defined
insulin-secr
                                                                                                                                                                                                                                                                                                                                                                             enal
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AAY28703
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY28703;
                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                           (e.g. re
present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY28
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                                                                                                                                                                                                           prevents
in vivo activity
                                                                                                                                                                                                                                                                                                                                                              covalently
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (half
                                                                                                                                                                                                                                                                                                                                             attached
                                                                                                                                                                                                                                                                                                                                                                                               amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                            nous therapeut
                                                                                                                                                                                                                                                                                                                                                                                 form
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  equire treq
in the body
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      prevents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     activity
                                                                                                                                                                                                                                                                                                                                                                                                                 hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                  The present invention describes a modified therapeutic pepticomprising a therapeutically active amino acid region (III) reactive group (II) (e.g. succinimidyl and maleimido groups) a less therapeutically active amino acid region (IV), which bonds with amino/hydroxyl/thiol groups on blood components to peptidase stabilised therapeutic peptide composed of 3-50 am (I) are useful for modifying therapeutic peptides e.g. hormofactors and neurotransmitters, to protect them from peptidas in vivo for the treatment of various disorders. Endogenous to peptides are not suitable as drug candidates as they require administration due to rapid degradation by peptidases in the Modifying and attaching therapeutic peptides to albumin preveduces the action of peptidases to increase length of activitie) and specificity as bonding to large molecules decrease intracellular uptake and interference with physiological propagalification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                 ents
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Somatostatin analogue; syndrome X of Reaven; hyperinsudiazoxide; cyclothiazide; metformin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Inde
                                                                                                                                                                                                and attaching therapeutic peptides to album degradation, useful for increasing length or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Somatostatin analogue for the treatment of syndrome X
                                                                                                                                       Holmes DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 105; DB 2
Pred. No. 1e-08;
2; Mismatches
                                                                                                                                                                                                                                                                     Disclosure; Page 252; 733pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW51859 standard; peptide; 28 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25
                                                                                                                                       Milner PG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LPPRERKAGCKNFYWKGFTSC
                                99US-0134406.
99US-0153406.
99US-0159783.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 81.0%;
Matches 17; Conservative
    2000WO-US13576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96IL-0119403
96IL-0119250
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                                                                                                                                      Ezrin AM,
                                                                                                    (CONJ-) CONJUCHEM INC
                                                                                                                                                                      WPI; 2001-112059/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COHEN
                               17-MAY-1999;
10-SEP-1999;
15-OCT-1999;
17-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9810786-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-MAR-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-OCT-1996;
12-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-SEP-1998
                                                                                                                                      Bridon DP,
                                                                                                                                                                                                      Modifying peptidase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAW51859;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
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Glucagon-like
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12-JAN-1998;
12-JAN-1998;
03-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present that stably region that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-JUL-1999
                                                                                                                                     invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY24239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SA,
                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Clark
                                                                                                                                                                                                                                                                                                                                                                    RESULT
AAY2423
                                            8888888
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                                                                                                                                                 inhibited clone
                                                                                                                                                                                                      ecretion in the
roduced in cell
ng diabetes, fo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes a method for identifying modulators (I) of secretory function by treating an immortalised cell, having a stable secretory function, with a test compound and detecting any change in secretion caused by the compound. (I) are used to control secretion of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              y cell;
based disorder
                                                                                                              secretion in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptide
for treating
                                                                             analogue
                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                              28;
                                                                                                   rmone
                                                                                                                                                                                                                                           ating
                             The present sequence is a mouse somatostatin (SS-28) hormwas found to inhibit the release of growth hormone, thyrohormone, insulin and glucagon. In addition, SS-28 and its octreotide may inhibit growth of some tumours. The hormone used to study its effect on glucose-stimulated insulin sending hexpressing and non-expressing clones of mouse somator receptor, type V gene (SSTRV). The insulin secretion was in the high expressing clone as compared to the non-expressing clone showed high sensitivity somatostatin. The hormone effectively inhibits insulin seabsence of glucose. The somatostatin receptor can be intributed, used in cell-based delivery of insulin for treating precise regulation of insulin release.
                                                                                                                                                                                                                                                                                                                                                                  lels
                                                                                                                                                                                                                                                                                                                              다
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                to control specifically
                                                                                                                                                                                                                                                                                                                                                                Ind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glucagon-like peptide I receptor; GLP-1 receptor; drusecretory function; immortalised neuroendocrine secre regulation; diabetes; insulin secretion; neuroendocri Parkinson's disease; athyrotic cretinism; Addison's d
                                                                                                                                                                                                                                                                                                                                Leng
                                                                                                                                                                                                                                                                                                                          Score 105; DB 20;
Pred. No. 1.1e-08;
2; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New modulators of secretory function, used to secretion from cells in vivo or in vitro, specdiabetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 8; Page 153-154; 309pp; English.
  312pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Somatostatin peptide hormone SS-28
                                                                                                                                                                                                                                                                                                                                                                                            Thigpen AE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98US-0087848.
98US-0071193.
98US-0071209.
98US-0072556.
                                                                                                                                                                                                                                                                                                                       Ouery Match
Best Local Similarity 81.0%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY24384 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-US00551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
Example 8; Page 143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Quaade C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (BETA-) BETAGENE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-430454/36.
                                                                                                                                                                                                                                                                                       28 AA;
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12-JAN-1998;
12-JAN-1998;
12-JAN-1998;
03-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAY24384;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Clark SA,
                                                                                                                                                                                                                                                                                        Sequence
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AAY24

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ells to a modulator of (I) secretion. (A) are specifically transplantation, to treat diabetes or hypoglycaemia (especially sociated with insulin therapy) but more generally are used to proteins and growth factors. Also engineered neuroendocrine a stable phenotime.
ley are use secretion,
                                  neuroendocrine-based disorders
cretinism and Addison's disease.
                                                                           The method uses engineered, immortalised cells that are available in large amounts, with a stable and predictable phenotype. They allow screening to be performed in vivo. The present sequence represents a somatostatin peptide hormone SS-28 used in an example from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     e present invention describes immortalized neuroendocrine cells (A) at stably secrete a polypeptide hormone (I) contain an expression gion that includes a transgene (TG), linked to a promoter functional eukaryotic cells, such that expression of TG increases sensitivity the cells to a modulator of (I) secretion. (A) are specifically
                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              r secrete
and hypoglycaemia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a used to identify new therapeutic agents or drug targets. a stable phenotype and particularly inducible glucagon and glucose counter-regulatory capacities, i.e. they balinglycaemic effects of beta-cell loss and the hypoglycaemic
                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                       Length
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                                                         cretinism
                                                                                                                                                                                                                                                     Score 105; DB 20;
Pred. No. 1.1e-08;
; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diabetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cells that
                                   disease, athyrotic columnated, immortalised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  to treat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         line; glycaemic hypoglycaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Page 148; 318pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New immortalized neuroendocrine polypeptide, particularly used t
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                                                                                                                                                                                                                                                                                                                                       LPPRERKAGCKNFYWKGFTSC
                                                                                                                                                                                                                                                                                                                                                           71.4%;
81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           somatostatin
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98US-0071193.
98US-0071209.
98US-0072556.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY24239 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US00631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              etion and glucose count
hyperglycaemic effects
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          line;
                                                                                                                                                                                                                               Query Match
Best Local Similarity 81.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Thigpen AE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         express, in vivo, a ware amidated proteins and cells are used to iden
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 used, by transplantat.
Where associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               genetic engineering;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BETA-) BETAGENE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-419351/35.
                 but can also be use such as Parkinson's The method
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide hormone
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             eptidase activi
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                                                 nseq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             activity
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                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes a modified therapeutic peptide comprising a therapeutically active amino acid region (III) an reactive group (II) (e.g. succinimidyl and maleimido groups) a less therapeutically active amino acid region (IV), which co bonds with amino/hydroxyl/thiol groups on blood components to peptidase stabilised therapeutic peptide composed of 3-50 amin (I) are useful for modifying therapeutic peptides e.g. hormone factors and neurotransmitters, to protect them from peptidase in vivo for the treatment of various disorders. Endogenous the peptides are not suitable as drug candidates as they require fadministration due to rapid degradation by peptidases in the bondifying and attaching therapeutic peptides to albumin preven reduces the action of peptidases to increase length of activities) and specificity as bonding to large molecules. decreases intracellular uptake and interference with physiological proce AAB90829 to AAB92441 represent invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            conjud
group;
                                                                                                                                                           28;
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                                                                                                                                                                                                              lels
                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Modifying and attaching therapeutic peptides to albumin
peptidase degradation, useful for increasing length of
effects of administered insulin. Since they are of hu are less likely to suffer immune rejection than xenog sequence represents the peptide hormone somatostatin example from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protection; endogenous therapeutic peptide; peptidase blood component; modification; succinimidyl; maleimid hydroxyl; thiol; hormone; growth factor; neurotransmi
                                                                                                                                                             Score 105; DB 20;
Pred. No. 1.1e-08;
2; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Holmes DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Somatostatin related peptide SEQ ID NO:192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 252; 733pp; English.
                                                                                                                                                                                                                                                   AAB91018 standard; Peptide; 28 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-0134406.
99US-0153406.
99US-0159783.
                                                                                                                                                        Query Match
Best Local Similarity 81.0%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000WO-US13576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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                                                                                                              28 AA;
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10-SEP-1999;
15-OCT-1999;
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Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB91018;
                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
AAB91018
ID AAB91
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somatostatin polypeptide SS-I) and/or a portion of uences and their
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ry products
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gonists are effective in the
encoding the polypeptides
can be targeted to neoplasm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           applications. The wild-type somatostation constitutions tumours a useful for treating hypersecretion from endocrine tumours and the a acromegaly) or gastroenteropancreatic tissues (e.g., and a acromegaly) or gastroenteropancreatic tissues to a string the acromegaly or gastroenteropancreatic tissues for the acromegaly or the acromegaly or the acromegaly or the acromegaly of the acromegaly or the acromegal or the acromegal or the acromegal or the acrome
                                                                                                                                        Gaps
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acquired
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                                                                   28;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      neurological
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                                                                       Length
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itary gland; g
gastrinoma; d
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disorders -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disease;
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vild-type somatostatin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acquired immunodericiency symmetrics disea Alzheimer's disease; Huntington's disease; Alzheimer's disease; Huntington's disease therapy; antidiabetic;
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od somatostatin antaqonis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         preprosomatostatin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               osteopathic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mykiss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tic tissue; acromegaly; gast cell proliferation; apoptos immunodeficiency syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   acromegaly) or gastroenter
noma, carcinoid syndrome),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    peptider
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                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mammalian somatostatin 28 (SS-28) peptide
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105; DB 22) No. 1.1e-08;	Mismatches		
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Search completed: August 13, 2003, 14:50:59 Job time : 46.7949 secs

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DRESSEE: THE SCRIPPS RESEARCH INSTITUTES: 10666 No. US20020013456Alth TOITY: La Jolla ATE: California INTRY: US
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/766,396
FILING DATE: 18-Jan-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/857,389
FILING DATE: <Unknown>
FILING DATE: <Unknown>
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CITY: La

STATE: Calire.
COUNTRY: US

ZIP: 92037

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
COMPUTER: PATENTIN RELEASE
**OFTWARE: PATENTIN RELEASE #*1
**OFTWARE: PATENTIN NOTAR:
**OFTWARE: PATENTIN RELEASE #*1
**OFTWARE: PATENTIN RELEASE **1
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ENERAL INFORMATION:
APPLICANT: Sutcliffe, Gregon
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INVENTION: CO
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(c) 1993 - 2003 Compugen Ltd
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US-10-251-703-18

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INFORMATION FOR SEQ

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Pred. No.
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ORGANISM: Artificial Sequence
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Similarity 81.0%;
17; Conservative
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COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/062,375
FILING DATE: 30-Jan-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION NUMBER: US/08/857,389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020133000A1th Torrey
CITY: La Jolla
STATE: California
COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                            AL INFORMATION:
APPLICANT: Sutcliffe, Gregor J.
de Lecea, Luis
Siggins, George R.
Henriksen, Steven J.
TITLE OF INVENTION: CORTISTATIN: NEUROPEPTII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   th 71.4%; Score 105; DB 14; Similarity 81.0%; Pred. No. 5.4e-08; 17; Conservative 2; Mismatches 2
                                                                                                                                                        DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: <Unknown>
RNEY/AGENT INFORMATION:
NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002
                                                                                                                                                        Score 105; D. Pred. No. 5.4
                                                                                                            m
                                 TYPE: amino acids
TYPE: amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: C-terminal
SEQUENCE DESCRIPTION: SEQ ID NO:
US-09-766-396-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ID NO:
                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-7041
TELEFAX: (415) 324-0638
                                                                                                                                                                                                                 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                       Sequence 3, Application US/10062375
Publication No. US20020133000A1
GENERAL INFORMATION:
APPLICANT: Sutcliffe, Gregor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 110 amino acids TYPE: amino acid
                                                                                                                                                                                                                  5 LPPRERKAGCKNFYWKGFTSC
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MOLECULE TYPE: protein

FRAGMENT TYPE: C-terminal

SEQUENCE DESCRIPTION: SEQ
US-10-062-375-3
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LENGTH: 110 amino ac
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                                                                                                                                                       th 71.4%;
Similarity 81.0%;
17; Conservative
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1: California
1RY: US
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 92037
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SEQUENCE CH
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                                                                                                                                                                                                                                                                                            RESULT 2
US-10-062-375-3
                                                                                                                                                       Query Match
Best Local S
Matches 17
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Matches 17
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GROWTH HORMONE SECRETAGOG
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                                                                                                                                                                                                                                                                                          LOW MOLECULAR WEIGHT PEPTIDOMIMETIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence:
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; OTHER INFORMATION: Agonist Peptide Sequence
US-10-251-703-18
                                                                                                                                                                                                                                                                                                                                                        R: US 09/057,074
-04-08
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                                                                                                       Application US/10224640
No. US20030139348A1
                                                                                                                                                                                                                                                                                                                                                                                                   R: US 0
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ORGANISM: Artificial Sequence
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20030148449A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity 85.
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Best Local
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Best Local S
Matches 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                              RESULT 5
US-10-101-487-52
Sequence 52, Application US/10101487
Publication No. US20020169125A1
GENERAL INFORMATION:
APPLICANT: LEUNG, DAVID W.
APPLICANT: LOFQUIST, ALAN
APPLICANT: PIETZ, GREGORY E.
APPLICANT: PIETZ, GREGORY E.
TITLE OF INVENTION: RECOMBINANT PRODUCTION OF POLYANIONIC F.
TITLE OF INVENTION: THEREOF
FILE REFERENCE: 077319/0329
CURRENT APPLICATION NUMBER: US/10/101,487
CURRENT APPLICATION NUMBER: 60/277,705
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 116
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 52
LENGTH: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/09316505
Sequence 2, Application US/09316505
Sequence 2, Application US/09316505
Sequence 2, Application US/09316505
GENERAL INFORMATION:
APPLICANT: Burnier, John P.
APPLICANT: Clark, Ross G.
APPLICANT: Elias, Rathleen A.
APPLICANT: Rawson, Thomas E.
APPLICANT: Rawson, Thomas E.
APPLICANT: Somers, Todd C.
APPLICANT: Somers, Todd C.
APPLICANT: Stanley, Mark S.
TITLE OF INVENTION: LOW MOLECULAR WEIGHT PEPTIDOMIMETIC GROFILE REFERENCE: P0850D2
CURRENT FILING DATE: 1999-05-21
PRIOR FILING DATE: 1999-05-21
PRIOR FILING DATE: 1998-04-08
NUMBER OF SEQ ID NOS: 2
SEQ ID NO 2
LENGTH: 14
TYPE: PRT
CORGANISM: Homosapiens
US-09-316-505-2
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OTHER INFORMATION: Description of Artificial Sequence:
S-10-101-487-52
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Pred. No. 6.8e-05;
2; Mismatches 1
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Pred. No. 9e-05;
1; Mismatches
                  184 EEEAGCKNFFWKTFTSC 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Artificial Sequence
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Best Local Similarity 80.0%;
Matches 12; Conservative
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Best Local Similarity 85.7%;
Matches 12; Conservative
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TS-09-316-505-2
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REFERENCE,
TELECOMMUNICAT
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12; Conser
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US-09-766-396-7
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                                                                                                                                                  INFORMATION
                                                                                                                                                                                                                                                                                                                                                         Local
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                                                                                      Sequence 37, Application US/10101487

Sequence 37, Application US/10101487

Publication No. US20020169125A1

GENERAL INFORMATION:

APPLICANT: LEUNG, DAVID W.

APPLICANT: LEUNG, DAVID W.

APPLICANT: LORGUIST, ALAN

APPLICANT: PIETZ, GREGORY E.

APPLICANT: TOMPKINS, CHRISTOPHER K.

APPLICANT: TOMPKINS, CHRISTOPHER K.

APPLICANT: WAGGONER JR., DAVID W.

TITLE OF INVENTION: THEREOF

FILE REFERENCE: 077319/0329

CURRENT FILING DATE: 2002-03-20

PRIOR FILING DATE: 2001-03-21

NUMBER OF SEQ ID NOS: 116

SOFTWARE: PATENTIN VET. 2.1

SEQ ID NO 37

LENGTH: 14
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US-09-766-396-7
; Sequence 7, Application US/09766396
; Patent No. US20020013456A1
; GENERAL INFORMATION:
; APPLICANT: Sutcliffe, Gregor J.
de Lecea, Luis
Siggins, George R.
Henriksen, Steven J.
Henriksen, Steven J.
COMPOSITIONS AND METHODS
COMPOSITIONS AND METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.2

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/766,396

FILING DATE: 18-Jan-2001

CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lengt
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US-10-101-487-37
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CORRESPONDENCE ADDRESS:
ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020013456Alth Torrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 14;
9e-05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 77;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 52.4%;
Best Local Similarity 85.7%;
Matches 12; Conservative
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: California
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STATE: Ca
COUNTRY:
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US-10-101
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Length 29;
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: 30-Jan-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <Unknown>
INFORMATION
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7, Application US/10062375
1on No. US20020133000A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION
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                                                                                                                                                                                                               IBM PC C
SYSTEM:
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Query Match

Matches

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THE SCRIPPS RESEARCH INSTITUTE 66 No. US20020133000Alth Torrey
                                                                                                    NEUROPEPTIDES
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                                                                                                                                                                                                                                                                                                                                   PatentIn Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/857
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OLECULE TYPE: protein
RAGMENT TYPE: C-terminal
EQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/10/
FILING DATE: 30-Jan-2002
                                                                                                                                                                                                                                                                                                                                                                                                       <Unknown>
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US20020013456A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER REFERENCE/DOCKET NUMBER
                                                                                                                                                                                                                                                                     READABLE FORM:
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COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Henriksen,
                                                                                                                                                                                                                                                                                                                                                                                                     FICATION:
                                                                                                                                     SEQUENCES
                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION
                                                                  Siggins,
Henrikse
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                                                                                                  INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
               GENERAL INFORMATION APPLICANT: Sut
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ
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                                                                                                 TITLE
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02
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS'

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/766,396

FILING DATE: 18-Jan-2001

CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/857,389
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                                                                                                                                                                                                                                                                           APPLICANT: Sutcliffe, Gregor J.

APPLICANT: Sutcliffe, Gregor J.

de Lecea, Luis
Siggins, George R.

Henriksen, Steven J.

TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,

COMPOSITIONS AND METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                            SE: THE SCRIPPS RESEARCH INSTITUTE
10666 No. US20020013456Alth Torrey
1 Jolla
                                                         Score 77; DB 14;
Pred. No. 0.00019
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 77; DB 9;
Pred. No. 0.00054;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-7041
TELEFAX: (415) 324-0638
FORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 85 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
         ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear

MOLECULE TYPE: protein

FRAGMENT TYPE: C-terminal

SEQUENCE DESCRIPTION: SEQ ID NO:
US-09-766-396-6
                                                                                                                                                                                                  RESULT 12
US-09-766-396-6
Sequence 6, Application US/09766396
Patent No. US20020013456A1
GENERAL INFORMATION:
APPLICANT: Sutcliffe, Gregor
                                                                                                                       6 PPRERKAGCKNFYWKGFTSC 25
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ATTORNEY/AGENT INFORMATION:
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US-10-062-375-6
; Sequence 6, Application US/1006237
; Publication No. US20020133000A1
        SEO
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Llarity 60.0%;
Conservative
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: California
                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS
ADDRESSEE: THE SC
; SEQUENCE DESCRIPTION: US-10-062-375-7
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STATE: Call
COUNTRY: US
ZIP: 92037
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SEQUENCE CHARAC
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Matches 12; Conserv
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/766,396
FILING DATE: 18-Jan-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/857,389
FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Inde
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 77; DB 9; LA
Pred. No. 0.00071;
2; Mismatches 6;
                                                                                                                                                                                FILING DATE: CUNKNOWN>

ATTORNEY/AGENT INFORMATION:

NAME: SCHMONSEES; William

REGISTRATION NUMBER: 31,796

REFERENCE/DOCKET NUMBER: 22908-0002

TELECOMMUNICATION INFORMATION:

TELEFAX: (415) 324-7041

TELEFAX: (415) 324-7041

TELEFAX: (415) 324-0638

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 112 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-09-766-396-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ore 77; DB 12;
ed. No. 0.00071;
Mismatches 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3, Application US/10335125
; Sequence 3, Application US/10335125
; Publication No. US20030148355A1
; GENERAL INFORMATION:
; APPLICANT: Olsen, Henrik S.
; APPLICANT: Ruben, Steven M.
; TITLE OF INVENTION: CORTISTATIN POLYPEPTIDES
; FILE REFERENCE: 1488.0430003
; CURRENT APPLICATION NUMBER: US/10/335,125
; CURRENT FILING DATE: 2000-11-28
; PRIOR FILING DATE: 1997-12-31
; PRIOR FILING DATE: 1997-12-31
; PRIOR PILING DATE: 1996-12-31
; PRIOR PILING DATE: 1996-12-31
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 3
; LENGTH: 112
; TYPE: PRT
; ORGANISM: Rat Cortistatin
US-10-335-125-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 77;
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Best Local Similarity 60.0%;
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Search completed: August 13, 2003, 14:53:43

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Pred. No. is the number of results predicted by chance to } score greater than or equal to the score of the result being and is derived by analysis of the total score distribution.

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RESULT

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SUMMARIES A60842 S00169 151064 S00166 B60840 RIDS1 150798 JC6166 S20630 RIAFSI A61322 RIPGS RIPGS RIBOS1 RIBOS1 A32000 JC6167 C60414 B60842 A60840 S00172 S67489 Length Query Match Score **4449669** Resul

to a hydroxylysine-conta

L. Acad. Sci. U.S.A. 82, 277-281, 1985
Processing of an anglerfish somatostatin precursor
ce number: A94038; MUID:85113184; PMID:2857489
on: A94038

MRNA

ccession:

NID:964030; PIDN:CAA23987

change 28-May-1999

A21881

can goosefish) on 31-Mar-1981 A01434; A21887

#sequence_revision A94038; A27376; AC

distinct

P.; Crawford, R.; Shen, L.; Pictet, R.; Rutter, 18, 137-141, 1980 Cloning and sequence analysis of cDNAs encoding ice number: A93236; MUID:81052423; PMID:6107860

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	SOn	natostat	tin-25	- coho	salmon						
	N; 7	Alternat	te names	SS: SOM	natostatin		II precursor	sor			
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	C;I	Jate: 3(0-Sep-1	1993 #St	equence	ПĒ	c	30-Sep-1993	93 #text_change	shange 07-May-1999	
	?; ;	Accessic	on: A60	3842; C	C60842	•		ı			
	R; E	lisets	kaya, E	3.M.; PC	Pollock,			3, J.B.;	Hamilton,	J.W.; Kimmel, J.R.;	And
	Ger	Comp.	. Endoc	rinol.	63, 25	252-263	53, 1986				:
٠.	Α;	ritle: (Charact	erizat	44	Coho	salmon	(Oncorh		kisutch) islet somatostatin	atin
	A; I	A; Reference n	rence number: A6	ber: A6	50842; M	DID	MUID: 87055212	; PMID:	2877919		
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82.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: protein
A; Residues: 47-74 <CUT>
C; Superfamily: somatostati
C; Keywords: glycoprotein;
F; 1-12/Product: peptide S1
F; 13-46/Product: peptide S
F; 47-74/Product: peptide S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S.M.; Carne,
14, 57-61, 1
amino-acid
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three peptides
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A; Molecule type: protein
A; Residues: 98-125 <SPI>
B; Andrews, P.C.; Nichols, R.; Dixon, J.E.
J. Biol. Chem. 262, 12692-12699, 1987
A; Title: Post-translational processing of preprosomatostatin-II exam. A; Reference number: A27376; MUID:87308304; PMID:2887572
A; Reference number: A27376; MUID:87308304; PMID:2887572
A; Recession: A27376
A; Residues: 1-76, 'DV', 79-89, 'G', 91-125 <AND>
C; Superfamily: somatostatin
A; Residues: 1-76, 'DV', 79-89, 'G', 91-125 <AND>
C; Superfamily: somatostatin
C; Keywords: hydroxylysine; neuropeptide; pyroglutamic acid
F; 1-24/Domain: signal sequence #status experimental <PRO>
F; 25-97/Domain: propeptide #status experimental <PRO>
F; 25-97/Domain: propeptide #status experimental <AMT>
F; 25/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form F; 114-125/Disulfide bonds: #status experimental
F; 110/Modified site: hydroxylysine (Lys) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 138; DB 1; Length 125;
Pred. No. 3e-13;
1; Mismatches 1; Indels
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C; Species: Platichthys flesus (European flounder)
C; Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_changer, S. Accession: S00169
R; Conlon, J.M.; Davis, M.S.; Falkmer, S.; Thim, L.
Eur. J. Blochem. 168, 647-652, 1987
A; Title: Structural characterization of peptides derived from A; Reference number: S00166; MUID:88029486; PMID:2889597
A; Residues: 1-10;11-45;46-73 <CON>
A; Residues: 1-10;11-45;46-73 <CON>
A; Note: three peptides which probably originate from a common C; Superfamily: somatostatin
C; Superfamily: somatostatin
C; Superfamily: somatostatin
C; Keywords: glycoprotein; neuropeptide; pancreatic islet
F; 1-10/Product: peptide F1 #status experimental <PF3>
F; 11-45/Product: peptide F2 #status experimental <PF2>
F; 46-73/Product: peptide F2 #status experimental <PF2>
F; 62-73/Disulfide bonds: #status experimental
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C; Species: Oncorhynchus mykiss (rainbow trout)

C; Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_chang

C; Accession: 151064

R; Moore, C.A.; Kittilson, J.D.; Dahl, S.K.; Sheridan, M.A.

Gen. Comp. Endocrinol. 98, 253-261, 1995

A; Title: Isolation and characterization of a cDNA encoding for A; Reference number: 151064; MUID: 95354921; PMID: 7628684

A; Reference number: 151064

A; Reference num
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
91.2%; Score 134; DB 2; Length
Best Local Similarity 95.7%; Pred. No. 7.1e-13;
Matches 22; Conservative 1; Mismatches 0; Inde
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Best Local Similarity 92.0%;
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                                                                                                                                                                                                        r - shorthorn sculpin (tentative sequence
scorpius (shorthorn sculpin, daddy sculp
uence_revision 26-Jan-1996 #text_change 3
                                                                                                                                                                                                                                                                                                           Structural characterization of peptides derived from ice number: S00166; MUID:88029486; PMID:2889597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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Somatostatin-related and glucagon-related peptides
Ice number: A60840; MUID:89065329; PMID:2904391
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(Lys) (partial)
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6e-11;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        heuropeptide; pancreatic
#status experimental <P:</pre>
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Pred. No.
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des which probably classificated as Cotarne, A.; Cutfield,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Somatostatin-25 - European eel
N; Alternate names: somatostatin II pre
C; Species: Anguilla anguilla (European
C; Date: 30-Sep-1993 #sequence_revision
C; Accession: B60840
R; Conlon, J.M.; Deacon, C.F.; Hazon, N
Gen. Comp. Endocrinol. 72, 181-189, 191
A; Title: Somatostatin-related and gluc;
A; Reference number: A60840; MUID:89065
A; Accession: B60840
A; Molecule type: protein
A; Residues: 1-25 <CON>
C; Superfamily: somatostatin
C; Keywords: hormone; hydroxylysine; par
F; 20/Modified site: 5-hydroxylysine (L
                                                                                                                                                                                                                                                                                              Falkmer,
2, 1987
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Characterization
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                                                                                                                                                                                                             brain:
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                                                                                                                                                                                                                                                                                                                                             5; NID:g1890650; PIDN:AAC60093 both as a neurotransmitter/ne
                                                                                                                                                                Ö.;
                                                                                                                                                                                                          MOID:97057290; PMID:8901629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
2e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #sequence_revision 10-Sep-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ecies: Lophius americanus (American goosefish)
te: 31-Mar-1981 #sequence_revision 31-Mar-1981
cession: A93236; A93860; A91087; A01433
bart, P.; Crawford, R.; Shen, L.; Pictet, R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Karahashi, K.; Kato, S
Library, June 1991
sequence determination
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNAS
                                                                                           .bunda (laughing frog)
#sequence_revision 09-May
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Pred. No.
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Pred. No.
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141, 1980
and sequence analysis of <
ar: A93236; MUID:81052423;</pre>
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85.7%;
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                                                                                                                                                                                                                                                                                                                                             erences: GB:U68136
This protein acts
                                                                                                                                                             Costivint, H.; Lihrmann, I
bc: Natl. Acad. Sci. U.S.A
litle: Occurrence of two s
Reference number: JC6166;
Contents: brain
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Nucleotide St
mber: S20630
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RIIDSI
Somatostatin-14 precursor - channel catfish
NiAlternate names: somatostatin I
NiAlternate names: somatostatin I
NiAlternate names: somatostatin I
NiAlternate names: somatostatin I
NiAlternate names: somatostatin-14
C; Species: Intellurus punctatus (channel catfish)
C; Date: 30-Jun-1980 Seaguence_revision 31-Dec-1993 #text_change
C; Accession: S00292; A93897; A92334; A01435
R; Minth, C.D.; Taylor, W.L.; Magazin, M.; Tavianini, M.A.; Collid
A; Title: The structure of cloned DNA complementary to catfish pai
A; Reference number: S00292; MUID: 82265698; PMID: 617939
A; References: EMBL: V00607; NID: 964017; PIDN: CAA23877.1; PII
R; Taylor, W.L.; Collider, K.J.; Deschence; R.J.; Weith, H.L.; Dixc
A; Title: Sequence analysis of a cDNA coding for a pencreatic prec
A; Reference number: A93897; MUID: 82082515; PMID: 6171821
A; Reference number: A93897; MUID: 82082515; PMID: 6171821
A; Residues: 82-108 <AR>
A; Residues: B2-108 <AR>
A; Residues: B2-108 <AR>
A; Redidues: B2-104 <ARD>
C; Superfamily: somatostatin
C; Superfamily: somatostatin
C; Superfamily: somatostatin
C; Superfamily: somatostatin
F; 1-3-4/Domain: signal sequence #status predicted <ARD>
F; 101-114/Product: somatostatin-14 #status predicted <ARD>
F; 101-114/Product: somatostatin-14 #status experimental
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C; Species: Ictalurus punctatus (channel catfish)
C; Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_chang
C; Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_chang
C; Accession: I50798
R; Dixon, J.E.; Andrews, P.C.
Adv. Exp. Med. Biol. 188, 19-29, 1985
A; Title: Somatostatins of the channel catfish.
A; Reference number: I50798; MUID:85303576; PMID:2863931
A; Reference number: I50798
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: mRNA
A; Kesidues: 1-114 < DIX>
A; Cross-references: GB:M25903; NID:g213339; PIDN:AAA49339.1; P
C; Superfamily: somatostatin
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A; Cross-references: GB:V00640; GB:J00946; NID:g64028; PIDN:CAAR; Goodman, R.H.; Jacobs, J.W.; Chin, W.W.; Lund, P.K.; Dee, P. Proc. Natl. Acad. Sci. U.S.A. 77, 5869-5873, 1980
A; Title: Nucleotide sequence of a cloned structural gene codin A; Reference number: A93860; MUID:81077276; PMID:6108560
A; Molecule type: mRNA
A; Residues: 2-20, V', 22-82, E', 84-121 <GOO>
A; Residues: 2-20, V', 22-82, E', 84-121 <GOO>
A; Residues: 2-20, V', 22-82, E', 84-121 <GOO>
A; Reference number: A93905
A; Reference number: A93905
A; Reference number: A93905
A; Roce B.D.; Spless, J; Rivier, J.E.; Vale, W.
Endocrinology 105, 1410-1415, 1979
A; Title: Isolation and characterization of somatostatin from a A; Reference number: A91087; MUID:80046482; PMID:387385
A; Accession: A91087
A; Residues: 108-121 <NOE>
C; Superfamily: somatostatin
C; Keywords: neuropeptide
F; 1-24/Domain: signal sequence #status predicted <SIG>
C; Superfamily: somatostatin I #status experimental <MAT>
C; Il08-121/Pisulfide bonds: #status predicted
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A; Molecule type: protein
A; Residues: 15-28 <BUR>
C; Superfamily: somatostatin
C; Keywords: neuropeptide
F; 1-28/Product: somatostatin-28 #status experimental <S28>
F; 15-28/Product: somatostatin-14 #status experimental <S14:
F; 17-28/Disulfide bonds: #status experimental
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Pred. No. 5.9e-09;
2; Mismatches
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ilarity 81.0%;
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Dupont, A.; Arimura, A.; Redding, T.W.; Nishi, N.; Linth 509-514, 1976
n and structure of somatostatin from porcine hypothalamir: A90398; MUID:76136331; PMID:1252409
#text_change
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PMID:7353633
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1.8e-08;
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11y extended somatostatin:
: A91273; MUID:80113258; Ph
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4489-4493,
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RIPGS

PID:9342299

19318; NID: 9342298; PIDN: AAA36908.1; inhibits the release of somatotropin

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Indels

Length 116;

DB 1; 2:3e-08;

Score Pred:

71.48; 81.0%;

#status

d: No. 2.3 Mismatches

2003,

predicted <PRO> #status predicted <M28> #status predicted <M14 predicted

predicted

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A28968; MUID:88144503;
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/Disulfide bonds:
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N; Contains: somatostatin, 14 (SS-14); somatostatin 28 (SS-28)
C; Species; incomo sapiens (man)
S; Scalaba, 17-Dec-1902 steat_change 18-Jun-1999
R; Man, 2. P.; Marter, W.J.
A; Mritte: Sq. 118:171, 1984
A; Mritte: Mritte:
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N; Alternate names: preprosomatostatin
N; Contains: somatostatin 14 (SS-14); somatostatin 28 (SS-28
C; Species: Macaca fascicularis (crab-eating macaque)
C; Date: 30-Jun-1989 #sequence_revision 31-Jan-1997 #text_ch
C; Accession: A28968
R; Travis, G.H.; Sutcliffe, J.G.
Proc. Natl. Acad. Sci. U.S.A. 85, 1696-1700, 1988
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Proc. Natl. Acad. Sci. U.S.A. 85, 1696-1700, 1988
A;Title: Phenol emulsion-enhanced DNA-driven subtractive CD
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

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August 13, 2003, 14:47:17; Search time 9.61539 (without alignments) 122.269 Million cell Run on:

US-09-727-739B-16 147 1 SVDNLPPRERKAGCKNFYWKGFTSC 25

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BLOSUM62 Gapop 10.0 , Gapext 0.5 Title: Perfect score: Sequence: Scoring table:

127863 seqs, 47026705 residues Searched:

Total number of hits satisfying chosen parameters:

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RESULT

/r7,Gjy10]somatostatin-14].
(Anglerfish).
Vertebrata; Euteleostomi;
Euteleostei; Neoteleostei;
Liformes; Lophiidae; Lophius SEQUENCE FROM N.A.
MEDLINE-81052423; PubMed-6107860;
Hobart P.M., Crawford R., Shen L., Pictet R., Rutter W.J.;
Hobart P.M., Crawford R., Shen L., Pictet R., Rutter W.J.;
"Cloning and sequence analysis of cDNAs encoding two distinct somatostatin precursors found in the endocrine pancreas of Neopterygil; Teleostei; Euteleost Paracanthopterygil; Lophiiformes; update) update) 125 cannotation up [Contains: [Ty can goosefish] sednence PRT; Somatostatin II precursor (Co Lophius americanus (American Eukaryota; Metazoa; Chordata, STANDARD; SMS2_LOPAM STANDARI P01170; Q91066; 21-JUL-1986 (Rel. 01, C 01-OCT-1989 (Rel. 12, I 16-OCT-2001 (Rel. 40, I Actinopterygii; Acanthomorpha;

anglerfish."; Nature 288:137-141(1980)

MISCELLANEOUS: SOMATOSTATIN II MAY HAVE A DIFFERENT DEGREE OF ACTIVITY OR A DIFFERENT TYPE OF TARGET CELL FROM SOMATOSTATIN SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY. MEDLINE-87308304; PubMed-2887572; Andrews P.C., Nichols R., Dixon J.E.; "Post-translational processing of preprosomatostatin-II examined using fast atom bombardment mass spectrometry."; J. Biol. Chem. 262:12692-12699(1987). ATION: Secreted. SOMATOSTATIN II SUBCELLULAR LOCATION:

There are no restrictions on the ed. Usage here isb-sib.ch/announce (See http://www is produced cmatics institute. Therestement itement in the European browners the European browners by non-profit instruction nodified and this statement is not modified and this statement is not modified and this statement (Section in the license dispension in the license dispensi This SWISS-PROT entry is copyright. It between the Swiss Institute of Bioinfo between the Swiss Institut the European Bioinformatics

Hydroxylation [TYR7,GLY10]SOMATOSTATIN-14 HYDROXYLATION.

DV -> TG (IN REF. 1).

G -> E (IN REF. 1).

5E14605D7B9A46FE CRC64; residues; Hormone; POTENTIAL 393236; RIAFS2. Pro; IPR004250; Somatostatin. PF03002; Somatostatin; 1. age on pair of basic residues gene family. 109 125 125 120 78 112 114 120 77 90 B93236; Multigene PIR; B932 InterPro; Cleavage

90 14052 MW;

CONFLICT

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SOMATOSTATIN FAMILY
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INHIBITS THE
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01-MAR-1989
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01-MAY-1991 (Rel. 18, Created)
01-MAY-1991 (Rel. 18, Last sequence update)
01-MAY-1991 (Rel. 40, Last annotation update)
16-OCT-2001 (Rel. 40, Last annotation update)
16-OCT-2001 (Rel. 40, Last annotation update)
Somatostatin II precursor (Contains: [Tyr21,Gly24]somatostatin
[Tyr7,Gly10]somatostatin-14] (Fragments).
Platichthys flesus (European flounder).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostc
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleos
Acanthomorpha; Acanthopterygii; Percomorpha; Pleuronectiformes
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TISSUE-Pancreas;

TISSUE-Pancreas;

TISSUE-Pancreas;

MEDLINE-88029486; Pubmed-2889597;

Conlon J.M., Davis M.S., Falkmer S., Thim L.;

Structural characterization of peptides derived from the pancreatic isl.

Toolsous teleostean fish: the daddy sculpin and the flour is blochem. 168:647-652(1987).

Collosing the construction of the flour collosity of the somatostatin Family.

Toolsous to the community of the somatostatin-14.

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SMS2_ONCMY STANDARD; PRT; 115 AA.

Q91194;

16-OCT-2001 (Rel. 40, Last sequence update)

16-OCT-2001 (Rel. 40, Last annotation update)

16-OCT-2001 (Rel. 40, Last annotation update)

Somatostatin II precursor [Contains: [Tyr21;Gly24]somatos

[Tyr7,Gly10]somatostatin-14].

Somatostatin II precursor [Contains: [Tyr21;Gly24]somatos

[Tyr7,Gly10]somatostatin-14].

Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutel

Actinopterygii; Neopterygii; Teleostei; Euteleostei;

Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhync

NCBI_TaxID-8022;

MEDLINE-95354921; PubMed-7628684;
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Matches 22; Conservative 1; Mismatches 0;
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Gly10]-somatostatin Oncorhynchus mykiss

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TO THE SOMATOSTATIN FAMILY
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Acanthomorpha; Acanthopterygil; Percomorpha;
Cottoidei; Cottidae; Myoxocephalus.
                                                                                                                                                                                                                                                                             update)
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sculpin islet
                                                                                           Mismatches
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                                                                                                                                                                                                                                                                                                                         Fragments
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Last annotation
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MEDLINE=87190954; PubMed=2883025
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Cypriniformes;

Teleostel; Ostariophysi;

XXX FITTERS

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Actinopterygil; Neopterygil;
Cyprinidae; Carassius.
NCBI_TaxID=7957;
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Somatostatin-I is
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19; Conser
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SMS1_AMICA
Q9PRZ6;
16-OCT-2001
16-OCT-2001
                                                                                                                                                                                                             SEQUENCE
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ies.";
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P81029;
01-NOV-1997 (Rel. 35, Last sequence update)
01-NOV-1997 (Rel. 40, Last annotation update)
16-OCT-2001 (Rel. 40, Last annotation update)
16-OCT-2001 (Rel. 40, Last annotation update)
Somatostatin II precursor [Contains: [Tyr21,Gly24]somatostatin-14] (Fragment).
[Tyr7,Gly10]somatostatin-14] (Fragment).
Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroide: Cichlidae; Oreochromis.
NCBI_TaxID-8128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SMS2_CARAU STANDARD; PRT; 120 AA.

O9YGH4; O9PTU2;

16-OCT-2001 (Rel. 40, Last sequence update)

16-OCT-2001 (Rel. 40, Last annotation update)

16-OCT-2001 (Rel. 40, Last annotation update)

16-OCT-2001 (Rel. 40, Last annotation update)

Somatostatin II precursor [Contains: [Tyr21,Gly24]somatostatin-28;

[Tyr7,Gly10]somatostatin-14].

Carassius auratus (Goldfish).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-95384941; PubMed-7656183;

MEDLINE-95384941; PubMed-7656183;

Nguyen T.M., Wright J.R. Jr., Nielsen P.F., Conlon J.M.;

"Characterization of the pancreatic hormones from the Brockmann of the tilapia: implications for islet xenograft studies.";

Comp. Biochem. Physiol. 111C:33-44(1995).

-1. FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.

-1. SUBCELLULAR LOCATION: Secreted.

-1. SUBCELLULAR LOCATION: Secreted.

-1. SUBCELLULAR LOCATION: Secreted.

-1. SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.

InterPro; IPR004250; Somatostatin.

Pfam; PF03002; Somatostatin; 1.

Cleavage on pair of basic residues; Hormone; Multigene family.

NON. TER
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[TYR7, GLY10] SOMATOSTATIN-14.
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Cleavage on pair of basic residues; Hormone; Multigen
NON_TER 1 1 1
NON_CONS 12 13
NON_CONS 46 47 74 [TYR21,GLY24]SOMATOSTATI
PEPTIDE 47 74 [TYR21,GLY24]SOMATOSTATI
PEPTIDE 61 74 [TYR7,GLY10]SOMATOSTATI
DISULFID 63 74 (TYR7,GLY10]SOMATOSTATIN
SEQUENCE 74 AA; 8036 MW; 6864A59A3FA72C47 CRC64;
                                                                                                                                                                               Score 123.5; DB 1; Len
Pred. No. 5.8e-12;
1; Mismatches 1; Ind
                                                                                                                                                6864A59A3FA72C47 CRC64;
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Pred. No. 5e-12;
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3155 MW;
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Similarity 82.1%;
23; Conservative
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Similarity 82.6%;
19; Conservative
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Amiidae; Amia.
                                                                                                                                 2-1997) to the EMBL/GenBank/DDBJ databases. SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN
                                                                                                                                                                                                                                                                     or
                                                                                                                                                                                                                                                                                                                                                                                       Signal; Multigene
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TYR7, GLY10]SOMATOSTATIN-14.
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98957D68011A651A CRC64;
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: Somatostatin 26;
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Eukaryota; Metazoa; Chordata; Craniata; A
Actinopterygii; Neopterygii; Amiiformes;
NCBI_TaxID=7924;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 110;
Pred. No. 1
                                                                                                                                                                                                                                                                                 s a license agreement (to license@isb-sib.ch)
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the bowfin, Amia c
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[Contains:
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SIMILARITY: BELONGS TO THE
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13723 MW;
Lin X.-W., Peter R.E.; "Cloning and characterization and -II from goldfish brain." Submitted (JUN-1996) to the El
                                                                                                                                                                                                                       Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     74.8%;
1larity 76.0%;
Conservative
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European Bloinformatics
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47:33-39(1993).
SOMATOSTATIN I
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MEDLINE-81264223; PubMed-6114953;
Andrews P.C., Dixon J.E.;
"Isolation and structure of a peptide hormone predicted sequence. A second somatostatin from the catfish pancrea J. Biol. Chem. 256:8267-8270(1981).
-1- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOSTATIN Secreted.
-1- SUBCELLULAR LOCATION: Secreted.
-1- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE-82265698; PubMed-6179939;
Minth C.D., Taylor W.L., Magazin M.D., Tavianini M.A.
Weith H.L., Dixon J.E.;
"The structure of cloned DNA complementary to catfish somatostatin-14 messenger RNA.";
"I Biol. Chem. 257:10372-10377(1982).
                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-JUL-1986 (Rel. 01, Created)
01-AUG-1990 (Rel. 15, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Somatostatin I precursor [Contains: Somatostatin-14 (Ictalurus punctatus (Channel catfish).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eakaryota; Metazoa; Chordata; Teleostei; Ostariophysi; Ictaluridae; Ictalurus.
NCBI_TaxID=7998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced the between the Swiss Institute of Bioinformatics and the European Bioinformatics Institute. There are no use by non-profit institutions as long as its conmodified and this statement is not removed. Usage bentities requires a license agreement (See http://www.or send an email to license@isb-sib.ch).
                                                             Multiger
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MEDLINE-82082515; PubMed-6171821;
Taylor W.L., Collier K.J., Deschenes R.J., Weith H.L.
"Sequence analysis of a cDNA coding for a pancreatic somatostatin.";
                                                                                                                                                            8A296DC3710552FE CRC64;
InterPro; IPR004250; Somatostatin.
Pfam; PF03002; Somatostatin; 1.
Cleavage on pair of basic residues; Hormone; MultiquerIng 1 1 26 SOMATOSTATIN-26.
PEPTIDE 1 26 SOMATOSTATIN-14.
DISULFID 15 26
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6e-10;
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MEDLINE-85303576; PubMed-2863931;
Dixon J.E., Andrews P.C.;
"Somatostatins of the channel catfish.";
Adv. Exp. Med. Biol. 188:19-29(1985).
                                                                                                                                                                                                                                                                           1;
                                                                                                                                                                                               th Similarity 85.7%;
18; Conservative
                                                                                                                                                           2931 MW;
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13
15
26 AA;
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SMS1_ICTPU
P01171;
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SOMATOSTATIN-14.
BY SIMILARITY.
B5920015E2D272A4 CRC64;
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                           -> Q (IN REF. 2)
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Pred: No. 2.8e-09
SOMATOSTATIN-14
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POTENTIAL
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                                                                                                                                                                                                                                                                                                                              (Goldfish)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       goldfish brain.
                                                                   72.8%;
85.7%;
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European Bioinformat
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18; Conser
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18; Conser
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Cyprinidae; Car
NCBI_TaxID=7957
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RESULT 10
SMS1_RANRI
ID SMS1_RANRI
ID SMS1_RANRI
AC P87384
DT 16-OCT
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W.J.; distinct

Dee P.C.

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RESULT 11 SMS_CHICK ID SMS_C

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PR004250;
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es 17; Conser
   INE-86030691;
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Pfam; PF03002;
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01-AUG-1992
                                 Creutzfeldt
"Isolation
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SMS_BOVIN
ID SMS_BOVIN
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Submitted
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NON_TER
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.

NCBI_TaxID=9823;
[1]
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G -> E (IN REF. 2).
D70C53DC798C2095 CRC64
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PMS_PIG STANDARD; PRT; 92 AA.
P01168;
21-JUL-1986 (Rel. 01, Created)
01-OCT-1989 (Rel. 12, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Somatostatin precursor [Contains: Somatostatin-28; Somatostatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 1-64.
MEDLINE-89278131; PubMed-2567292;
Bersani M., Thim L., Baldissera F.G.A., Holst J.J.;
Bersani M., Thim I., Baldissera F.G.A., Holst J.J.;
"Prosomatostatin 1-64 is a major product of somatosta expression in pancreas and gut.";
J. Biol. Chem: 264:10633-10636(1989).
                                              ERRATUM.
Goodman R.H., Jacobs J.W., Chin W.W., Lund P.K., Dee Habener J.F.;
Proc. Natl. Acad. Sci. U.S.A. 79:1682-1682(1982).
Habener J.F.;
"Nucleotide sequence of a cloned structural gene
precursor of pancreatic somatostatin.";
Proc. Natl. Acad. Sci. U.S.A. 77:5869-5873(1980).
                                                                                                                                                                                                                                                                                                                                                    SOMATOSTATIN-14.
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105
4 121
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13325 MW;
72.8%;
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121 AA;
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(See http://www.lsb-sib.ch/announce,
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                       Carlquist M., Conlon J.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Ebropean Bioinformatics Institute. There are no restruce by non-profit institutions as long as its content modified and this statement is not removed. Usage by and entities requires a license agreement (See http://www.isb-sor send an email to license@isb-sib.ch).
                                                                                                                                                                                                                            Ribet A.;
the primary structure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         T.W., Nishi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                    oldt W.E., Mutt V., Kratzin H., Carlquist M., Conlon trzfeldt W.; Jation and characterization of proSS1-32, a peptide N-terminal region of porcine preprosomatostatin."; Lett. 192:141-146(1985).
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                                                                                                                                                                                                                                                                                                                                                          TISSUE-Hypothalamus;
MEDLINE-81054799; PubMed-6107906;
Schally A.V., Huang W.-Y., Chang R.C.C., Arimura Millar R.P., Hunkapiller M.W., Hood L.E.;
"Isolation and structure of pro-somatostatin: a precursor from pig hypothalamus.";
Proc. Natl. Acad. Sci. U.S.A. 77:4489-4493(1980)
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INHIBITS THE RELEASE
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SOMATOSTATIN-14
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r of basic residues; Hormone
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ont A., Arimura A.,
                                                                                                                                                                         TISSUE-Intestine;
MEDLINE-80113258; PubMed-7353633;
Pradayrol L., Joernvall H., Mutt V.
"N-terminally extended somatostatin somatostatin-28.";
FEBS Lett. 109:55-58(1980).
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PubMed-2865169
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Gantz

SOMATOTROPIN

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SOMATOSTATIN FAMILY

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SUBCELLULAR LOCATION:
SIMILARITY: BELONGS T
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                                                                                                                                                                                                                               Bos taurus (Bovine).

Bos taurus (Bovine).

Bos taurus (Bovine).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eute Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Chordae; Bovinae; Bos.

Bovidae; Bovinae; Bos.

KRY (1) Exidence (Bos).

RESQUENCE FROM N.A.

REDINE-882837; Pubmed-2899837;

Su C.J., White J.W., Li W.H., Luo C.C., Frazier M.L., Sai C.J., White J.W., Li W.H., Luo C.C., Frazier M.L., Sai C.J., White J.W., Li W.H., Luo C.C., Frazier M.L., Sai C.J., White J.W., Strausbaugh L., Zinn S.A.;

RY SEQUENCE FROM N.A.

STRAIN-HOISTEAIN;

REDINE-9918780; Pubmed-10100681;

RY FUTU L.M., Razaer G.W., Strausbaugh L., Zinn S.A.;

RY FUTU L.M., Razaer G.W., Strausbaugh L., Zinn S.A.;

RY C.Joning and characterization of the bovine somatostatin of Anim. Sol. 77:492-4931999.

- I- SUNCTION: SOMANOSTATIN INHIBITS THE RELEASE OF SOMATO.

- I- SUNCTION: SOMANOSTATIN INHIBITS

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; El
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Ca
01-AUG-1992 (Rel. 23, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Somatostatin precursor [Contains: Somatostatin-28;
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TISSUE-Gastric mucosa;
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Length 116;

DB 1; 5.8e-09;

Score 105; Pred. No.

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Indels

Mismatches

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Q8nvq. Q8nlv6 neu. Q8x1c4 talaromy. Q8t0n9 drosophila Q65922 caprine art Q42113 brachydanio ~4v466 drosophila ~ homo sapien

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ALIGNMENTS

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090Y43;
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2002 (TrEMBLrel. 20, Last annotation update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Preprosomatostatin.
Osteoglossum bicirrhosum (silver arawana).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleatinopterygii; Neopterygii; Teleostei; Osteoglossomorpha; Osteoglossiformes; Osteoglossidae; Osteoglossum.
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InterPro; IPR004250; Somatostatin
Pfam; PF03002; Somatostatin; 1.
SEQUENCE 115 AA; 12791 MW; D6
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"Characterization of
osteoglossomorphs: n
analysis.";
Submitted (AUG-2000)
EMBL; AF292650; AAKS
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SEQUENCE FROM N.A.
Al-Mahrouki A.A., Irwin D.M., Youson J.H.;
Characterization of variant somatostatin cDNAs from several osteoglossomorphs: molecular identification and comparative analysis.";
Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AF292651; AAK97068.1; -.
InterPro; IPR004250; Somatostatin.
Pfam; PF03002; Somatostatin; 1.
SEQUENCE 114 AA; 12352 MW; 7E3D44CB6A27B12F CRC64;
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Preprosomatostatin.
Pantodon buchholtzi (Butterflyfish).
Eukaryota; Metazoa; Chordata; Cranlata; Vertebrata; Eutele Actinopterygii; Neopterygii; Teleostei; Osteoglossomorpha; Osteoglossiformes; Pantodontidae; Pantodon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE.
MEDLINE-96051491; PubMed-8536941;
Uesaka T., Yano K., Yamasaki M., Ando M.;
Uesaka T., Yano K., Yamasaki M., Ando M.;
"Somatostatin-, vasoactive intestinal peptide-, and gpeptides isolated from intestinal extracts of goldfiss auratus.";
Gen. Comp. Endocrinol. 99:298-306(1995).
InterPro; IPR004250; Somatostatin.
Pfam; PF03002; Somatostatin; 1.
SEQUENCE 28 AA; 3204 MW; 15D271F677C945BE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         O9PRN9;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
GSS-28=SOMATOSTATIN-11ke peptide.
Carassius auratus (Goldfish).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Actinopterygii; Neopterygii; Teleostei; Ostariophysi;
NCBI_TaxID=7957;
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7E3D44CB6A27B12F CRC6
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Pred. No. 5.7e-13;
; Mismatches 0;
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Pred. No. 1.8e-12;
2; Mismatches 2;
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Best Local Similarity 95.5%;
Matches 21; Conservative
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Similarity 84.0%;
21; Conservative
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Teleostei; Anguilliformes; Anguillidae;
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Neopterygii; Teleostei; Osteoglossomorpha;
ss; Notopteridae; Chitala.
                                                                                                                                                                                                         Length 114;
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Teleostel; Osteoglossomorpha; Gnathonemus.
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454DA57A309CA8F2 CRC64;
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                                                                 Youson J.H.;
somatostatin cDNAs
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Pred. No. 3.3e-11;
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   Neopterygil; T
18; Mormyridae;
                                                                  Irwin D.M., of variant some molecular in
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ro; IPR004250; Somatosta
PF03002; Somatostatin;
CE 114 AA; 12494 MW;
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AA: 12561 MW;
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EMBL; AF292652; AAK9
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AF292653; AAK9
                                                                    Al-Mahrouki A..., -
"Characterization o
osteoglossomorphs:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Metazoa;
   Actinopterygii; Neo
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NCBI_TaxID-42645;
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NCBI_TaxID=112163;
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NCBI_TaxID=7937
[1]
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Pfam; PF03
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Q90Y41;
Q90Y41;
01-DEC-2001 (TrEMBLrel. 19, Created)
O1-DEC-2002 (TrEMBLrel. 19, Last sequence update)
O1-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Preprosomatostatin.
Gnathonemus petersii.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
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Chordata, Craniata, Vertebrata;
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us-09-727-739b-16

Length 120;

Indels

116 AA

RESULT 7 Q8JHX5

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te sturgeon).
; Craniata; Vertebrata; Euteleost
Acipenseriformes; Acipenseridae;
                                                                                                                                                                                                                                                                                                                                                          te sturgeon).
; Craniata; Vertebrata; Euteleos
Acipenseriformes; Acipenseridae
                                                        00828D35263E8805 CRC64;
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72E0C3FF6C80650F CRC64;
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Last annotation update)
                                                                                                                                                                                                                                                                                                           Last sequence update)
Last annotation updat
                                                                                      Score 107; DB 13;
Pred. No. 2.9e-09;
; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71.4%; Score 105; DB 13;
81.0%; Pred. No. 5.8e-09;
ive 2; Mismatches 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of somatostatin in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tostivint H., Lihrmann I.,
                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            two somatostatin precursors."
Neurol. 0:0-0(2001).
95849; AAL13248:1; -.
IPR004250; Somatostatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of somatostatin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cloning and
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                         Somatostatin.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (White
                         InterPro; IPR004250; Somatost
Pfam; PF03002; Somatostatin;
SEQUENCE 120 AA; 13783 MW;
                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata;
Actinopterygil; Chondrostei;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02; Somatostatin;
116 AA; 12616 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chordata;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Acipenser transmontanus (White
Eukaryota; Metazoa; Chordata;
Actinopterygii; Chondrostei;
                                                                                      72.8%;
72.0%;
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Best Local Similarity 81.v.
These 17; Conservative
                                                                                                    Similarity 72.0
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Best Local S
Matches 18
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Pfam; PF0
                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
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Q90XE0;
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                                                                                                                                            Length 25;
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090Y39;
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2002 (TrEMBLrel. 20, Last annotation update)
01.MAR-2002 (TrEMBLrel. 20, Last annotation update)
Preprosomatostatin.
Catostomus commersoni (White sucker).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eute
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; C;
Catostomidae; Catostomus.
NCBI_TaxID-7971;
MEDLINE-95053622; PubMed-7525832; Uesaka T., Yano K., Yamasaki M., Nagashima K., Ando M. "Somatostatin-related peptides isolated from the eel ion and water absorption across the intestine of the J. Exp. Biol. 188:205-216(1994).
InterPro; IPR004250; Somatostatin.
Pfam; PF03002; Somatostatin; 1.
SEQUENCE 25 AA; 2860 MW; BFC672143A04A3F5 CRC64;
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Al-Mahrouki A.A., Irwin D.M., Youson J.H.;
"Molecular cloning and characterization of white sucki
preprosomatostatin.";
Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databasi
                                                                                                                                                                                                                                                                                                                                                                                                                            Brachydanio rerio (Zebrafish) (Danio rerio).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Actinopterygii; Neopterygii; Teleostei; Ostariophysi;
Cyprinidae; Danio.
NCBI_TaxiD=7955;
                                                                                                      1.
BFC672143A04A3F5 CRC64;
                                                                                                                                                                                                                                                                                                                                                22, Created)
22, Last sequence update)
23, Last annotation update)
                                                                                                                                            Score 114; DB 13;
Pred. No. 4.3e-11;
0; Mismatches 4;
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Pred. No. 2.7e-09;
1; Mismatches 2
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Conservative 0;
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Best Local Similarity 85.7%;
Matches. 18; Conservative
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01-OCT-2002 (TrEMBLrel. 2
01-OCT-2002 (TrEMBLrel. 2
01-MAR-2003 (TrEMBLrel. 2
Somatostatin-14.
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Best Local Similarity
Matches 21; Conser
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Sollars C., Vallarino M

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Indels

Length 116;

Sollars C., Vallarino M.

in the sturgeon Acipenser distribution of the mRNAs

Vertebrata; Euteleostomi;

RESULT 8 Q90X39

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Gaps
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                                                                                                                                                                                                          Last sequence update)
Last annotation update)
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Mismatches
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Last sequence u
Last annotation
    Pred. No. 0.0; Mismatches
                                                                                                                                                                                                                                                                        Craniata; Vo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; V. Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 65;
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ilia; Eutheria; Primates;
_TaxID=9606;
                                                 ERKAGCKNFYWKGFTSC 25
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Eutheria; Primates;
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larity 40.7%;
Conservative
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     fmilarity 64.7
fmilarity 64.7
fmilarity 64.7
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(TrEMBLrel.
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ted (JUN-2002
AF521016; AAM
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11; Conser
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CBI_TaxID=9606;
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Q9SGS6
ID Q9SGS
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MEDLINE-99425190; PubMed-10495291;
Argenton F., Zecchin E., Bortolussi M.;
"Early appearance of pancreatic hormone-expressing cells in zebrafish embryo.";
Mech. Dev. 87:217-221(1999).
Mech. Dev. 87:217-221(1999).
EMBL; AJ238017; CAC20110.1; -.
ZFIN; ZDB-GENE-010219-2; Smst.
InterPro; IPR004250; Somatostatin.
Pfam; PF03002; Somatostatin; 1.
SEQUENCE 107 AA; 11839 MW; E12C923E56642EFB CRC64;
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PRELIMINARY; PRT; 107 AA.
Q9DDE4;
Q9DDE4;
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2002 (TrEMBLrel. 22, Last annotation update)
Somatostatin.
SMST OR SOM.
Brachydanio rerio (Zebrafish) (Danio rerio).
Brachydanio rerio (Zebrafish) (Danio rerio).
Cyprinidae; Danio.
NCBI_TaxID=7955;
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Q9PRV6;
Q9PRV6;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
O1-JUN-2002 (TrEMBLrel: 21, Last annotation update)
O1-JUN-2002 (TrEMBLrel: 21, Last annotation update)
Somatostatin homolog (Fragment).
Anguilla japonica (Japanese eel).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eukaryota; Metazoa; Chordata; Teleostei; Anguilliformes
InterPro; IPR004250; Somatostatin.
Pfam; PF03002; Somatostatin; 1.
SEQUENCE 111 AA; 12748 MW; 4E27DB90896A9025 CRC64
                                                                                              Ind
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Pred. No. 1.5e-06;
); Mismatches 4;
                                                               Score 92; DB 13;
Pred. No. 6.7e-07
; Mismatches
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Wesaka T., Yano K., Yamasaki M., Ando M.;

Zool. Sci. 11:491-494(1994).

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2655 MW;
                                                               Query Match
Best Local Similarity 66.7%;
Matches 16; Conservative
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Local Similarity 79.2%;
nes 19; Conservative
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NCBI_TaxID=7937
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SEQUENCE
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Matches 19
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Dr 1-MAR-2000 (TrEMBLrel. 13, Created)
Dr 11-MAR-2000 (TrEMBLrel. 13, Last sequence update)
Dr 11-MAR-2000 (TrEMBLrel. 13, Last sequence update)
Dr 11-MAR-2000 (TrEMBLrel. 13, Last sequence update)
Dr 16-MAR-2003 (TrEMBLrel. 13, Last sequence update)
Dr 16-MAR-2004 (Tremble Streptophyta; Embryophyta; Tracheophyta;
Dr 16-MAR-2004 (Tremble Streptophyta; Embryophyta; Tracheophyta;
Dr 16-MAR-2004 (Dr 19-MAR-2004)
Dr 16-MAR-2004 (Dr 19-MA
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Search completed: August 13, 2003, 14:52:59

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Compugen Ltd
version - 2003
GenCore Copyright (c) 1993
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Seconds Search time 26.2051 (without alignments) 84.799 Million cell u •• protein search, using sw model 2003, 14:45:37 August 13, OM protein Run on:

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US-09-727-739B-2 89 1 AGCKNFYWKGFTSC 14 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 Scoring table:

1107863 seqs, 158726573 residues: , Gapext 0.5 Searched:

chosen parameters Total number of hits satisfying

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 08
Maximum Match 1008
Listing first 45 summaries

being printed predicted by chance to lessone of the result being total score distribution No. is the number of results greater than or equal to the derived by analysis of the t Pred. No. score grea and is der

SUMMARIES

		DB ID Description	22 AAU07665 Rainbow trout soma	22 AAU07668	22 AAU07667 Rainbow trout	3 AAP20029 Sequence of pre	7 AAP60190 Somatosta	COMMITTED TO THE THE TO THE TH	10 AAP90989	2 AAP10324 Sometostatin	מביים ביים ביים ביים ביים ביים ביים ביים
		ch Length DB	14	111	115	125	14	28	28	14	
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		Score	89	68	68	83	83	83	83	77	ť
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AAP20165 AAP30668 AAP40316 AAP40808 AAP40808 AAP70928 AAP70928 AAR305413 AAR302932 AAW61514 AAW50940 AAW50940 AAW50940 AAW50940 AAW50940 AAW50940 AAW50940 AAW50940 AAW97182 AAW97182 AAW97182 AAW97182 AAW97182 AAW97182 AAW97182 AAW97183 AAW97183 AAW97705 AAB83200 AAW97705 AAB91001	COO TOWN
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ALIGNMENTS

14 Peptide; AAU07665 standard; AAU07665; RESULT 1

entry) (first 04-DEC-2001

sednence variant peptide (SS-14) 14 somatostatin trout Rainbow

trout; somatostatin;
; PPSS-II'; endocrine eropancreatic epilepsy; Rainbow PPSS-II

Oncorhynchus

03-JUN-2001:

2000CA-2325169. 01-DEC-2000; 99US-0168934. 03-DEC-1999;

(NDSU-) NDSU RES FOUND.

Kittelson JD; Moore CA, Sheridan MA,

Wed

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agonist useful
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     le1s
                                                                                                                                                                                                   The invention relates to an Oncorhynchus mykiss somatost containing a portion of preprosomatostatin I (PPSS-I) an preprosomatostatin II (PPSS-II). The protein sequences a associated polynucleotides are useful for identifying most somatostatin polypeptide which functions as a somatostat for research, therapeutics or diagnostics, including med veterinary applications. The wild-type somatostatin and version are useful for treating hypersecretion from endo the pituitary (e.g. acromegaly) or gastroenteropancreating astrinoma, glucagonoma, carcinoid syndrome), to cause through their effects on cell proliferation and apoptosi in the treatment of diabetes mellitus via inhibition of and glucagon. In addition, dysfunctional somatostatin seassociated with acquired immunodeficiency syndrome (AIDS neurological disorders (e.g. epilepsy, Alzheimer's diseas Huntington's disease) and somatostatin antagonists are etreatment of such conditions. Nucleic acids encoding the useful in gene therapy and fusion peptides can be target and their metastases, inhibiting the release of their seaths and their sequence represents a variant somatostatin 14 (SS-Inthis sequence represents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rainbow trout; somatostatin; preprosomatostatin; hyper; PPSS-II'; endocrine tumour; pituitary gland; gastroenteropancreatic tissue; acromegaly; gastrinoma; carcinoid syndrome; cell proliferation; apoptosis; grog glucagon; acquired immunodeficiency syndrome; neurolog epilepsy; Alzheimer's disease; Huntington's disease; neoplasm; metastasis; gene therapy; antidiabetic; nootlanti-human immunodeficiency virus; osteopathic; anticol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Leng
                                                New somatostatin polypeptides derived from Oncorhynch for treating diabetes mellitus, acromegaly, gastrinom immunodeficiency syndrome and neurological disorders
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6.5e-07;
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/note= "Prosomatostatin II''"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.0%; Pred. No. 6.9
Matches 14; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26..111 /note= "Mature PPSS-II''" 87..97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
1..25
/note= "Signal peptide"
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AAU07668
ID AAU07668 standard; Protein; 111 AA.
                                                                                                                                                           52pp; English.
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| AGCKNFYWKGFTSC 14
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'note=
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WPI; 2001-425997/46
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14 AA;
                                                                                                                                                             Claim 2; Fig 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oncorhynchus
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Peptide
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lypeptides are
to neoplasms
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                shrinkage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           apoptosis and as adjunction of growth hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for research, therapeutics or diagnostics, including medical and veterinary applications. The wild-type somatostatin and its modified version are useful for treating hypersecretion from endocrine tumours the pituitary (e.g. acromegaly) or gastroenteropancreatic tissues (e.g gastrinoma, glucagonoma, carcinoid syndrome), to cause tumour shrinkag through their effects on cell proliferation and apoptosis and as adjuntin the treatment of diabetes mellitus via inhibition of growth hormone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 in secretion is AIDS) and various
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      containing a portion of preprosomatostatin I (PPSS-I) and/or a preprosomatostatin II (PPSS-I) and/or a associated polynucleotides are useful for identifying modified somatostatin polypeptide which functions as a somatostatin agon for research, therapeutics or diagnostics, including medical and testing and the second or the second or diagnostics.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 111
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   II'' protein.
specifically
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1.7e-06;
ss 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             to an Oncorhynchus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 89;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         inhibiting
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                                                                                                                                                                                                                                                                                                                                                                                                                                       English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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96..97
/note- "
98..111
/note- "
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B; AAS12935.
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14; Conser
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associated with
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   Cleavage-site
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treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Fig
                                                                                                                                                                                                                                    UNDSU-) NDSU
                                                                                        CA2325169.-A1
                                                                                                                                                              01-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      neurological
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         treatment
useful in
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N-PSDB;
                                      Peptide
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Matches
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preprosomatostatin; hypersecretion;

polypeptide

Rainbow trout preprosomatostatin II

Rainbow PPSS-II' gastroen ö

Local

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tumours in
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acquired
carcinoid syndrome; cell proliferation; apoptosis; growth horm; glucagon; acquired immunodeficiency syndrome; neurological disepilepsy; Alzheimer's disease; Huntington's disease; neuroprotineoplasm; metastasis; gene therapy; antidiabetic; nootropic; canti-human immunodeficiency virus; osteopathic; anticonvulsant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to an Oncorhynchus mykiss somatost containing a portion of preprosomatostatin I (PPSS-II) and preprosomatostatin II (PPSS-II). The protein sequences a associated polynucleotides are useful for identifying mosomatostatin polypeptide which functions as a somatostat for research, therapeutics or diagnostics, including med veterinary applications. The wild-type somatostatin and version are useful for treating hypersecretion from endo the pituitary (e.g. acromegaly) or gastroenteropancreating astrinoma, glucagonoma, carcinoid syndrome), to cause the pituitary effects on cell proliferation and apoptosing the treatment of diabetes mellitus via inhibition of and glucagon. In addition, dysfunctional somatostatin seassociated with acquired immunodeficiency syndrome (AIDS neurological disorders (e.g. epilepsy, Alzheimer's disean Huntington's disease) and somatostatin antagonists are etreatment of such conditions. Nucleic acids encoding the useful in gene therapy and fusion peptides can be target and their metastases, inhibiting the release of their sequence represents O. Mykiss PPSS-II' protein. Note: The features for this sequence are specifically classection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New somatostatin polypeptides derived from Oncorhynchus for treating diabetes mellitus, acromegaly, gastrinoma immunodeficiency syndrome and neurological disorders -
                                                                                                                        Location/Qualifiers
1..25
/note= "Signal peptide"
1..87
/note= "PPSS-II' pre-sequence"
26 .115
/note= "Mature PPSS-II'"
                                                                                                                                                                                                                             /note= "Encoded by CAA"
88..101
/note= "PPSS-II' pro-sequence"
88..115
/note= "Prosomatostatin II'"
100..101
                                                                                                                                                                                                                                                                                                                     ...101
te- "Dibasic cleavage site"
                                                                                                                                                                                                                                                                                                                                     /note= "Dibasic cleavage site"
102..115
/note= "SS-14 variant peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kittelson JD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 2; Fig 3; 52pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000CA-2325169.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-0168934.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (NDSU-) NDSU RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Moore CA,
                                                                                          Oncorhynchus mykiss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-425997/46.
N-PSDB; AAS12934.
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                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                        Cleavage-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-DEC-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sheridan MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                03-JUN-2001.
                                                                                                                          Key
Peptide
                                                                                                                                                                                                                                                             Peptide
                                                                                                                                                                     Protein
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              Gaps
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              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 125;
              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tains a 14 AA sequence by only 2 AAs, and is
                                                                                                                                                                                                                         encoded on pLaS2
  9e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 os field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      them. The translation of somatostatin if (prepro S1) containing a signal peptideduring the transit into the endoplasmic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 89; DB 3;
Pred. No. 5.3e-06;
Mismatches 0;
                                                                                                                                                                                                                                              growth hormone; peptide hormone;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ρλ
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  Pred. No. 4. Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             preprosomatostatin-1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       , prosomatostatin-2
translation of soma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               add missing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             to correct PA
                                                                                                                                                                                                                                                                                          Location/Qualifiers
112..125
/label- Somatostati
                                                                                                                                                                                                                      preprosomatostatin-2
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larity 100.0%;
Conservative
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larity 100.0%;
Conservative (
                                                                                                 RESULT 4
AAP20029
ID AAP20029 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                    80US-0181046
                                                                                                                                                                    (updated)
(updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      esultant precursor (protestle presented).
                                                            102 AGCKNFYWKGFTSC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Crawford R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1982-18113E/10.
N-PSDB; AAN20034.
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encoding them. The t
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Best Local Similarity
                                                                                                                                                                                                                                                                     Lophius americanus.
Similarity
14; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                somatostatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        which
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                                                                                                                                                                                                                                              Somatostatin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The inventors
                                                                                                                                                                                                                                                                                                                                                                    03-MAR-1982.
                                                                                                                                                                                                                                                                                                                                                                                            21-AUG-1981;
                                                                                                                                                                     25-MAR-2003
16-AUG-2002
14-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                    25-AUG-1980;
                                                                                                                                                                                                                      of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hobart P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ong
                                                                                                                                                                                                                                                                                                                                             EP46669-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 precursor
released d
                                                                                                                                                                                                                        Sednence
                                                                                                                                                                                                                                                                                                        Protein
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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115

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Score 89;

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Length 28;
                                                                                                                                                                                                                                                                                                                                 somatostatin-28, which is more potent than 14 or somatostain-28 in inhibiting insulin treatment of insulinoma
                                                                                                                                                                                                                                                                   Angler fish somatostatin-28 and analogue and fragment inhibiting insulin secretion in insulinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Somatostatin 28; SS-28; analogue; insulin secrinhibitor; insulinoma; gastric acid secretion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 7;
1e-05;
                                                                                                                                                                                                                                                                                                                                                                                      secretion for treatment of insulinoma. (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 83; DB Pred. No. 1e-00; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'note-"Bonded to.Cys-28"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'note-"Bonded to Cys-17"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         anglerfish somatostatin 28
                                                                                                                                                                               (SALK ) SALK INST BIOLOGICAL STUDIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15..28
/note="Also claimed"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
17
                                                                                                                                                                                                                                                                                                                                     somatostatin-14 or sometostatin-28, which secretions
                    Lys
                                                                                                                                                                                                                                                                                                                English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tabel-Lys, Hyl
                 /label- Hyl,
                                                                                                       85EP-0305867.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93.3%;
                                                                                                                                  84US-0646610
87US-0033295
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        87US-0033295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AGCKNFYWKGFTSC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity 92.9
                                                                                                                                                                                                                                                                                                             19pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15 AGCKNEYWXGFTSC
                                                                                                                                                                                                                                       WPI; 1986-063363/10.
                                                                                                                                                                                                            Noe BD;
                                                                                                                                                                                                                                                                                                             Claim 4; Page 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                28 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
Disulfide-bond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disulfide-bond
                                                                                                                                   31-AUG-1984;
01-APR-1987;
                                                                          05-MAR-1986.
                                                                                                       16-AUG-1985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-2003
08-JUN-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US4816438-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Analogue of
                                           EP173527-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-MAR-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Anglerfish
                                                                                                                                                                                                          Spiess J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAP90989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Region
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The protein sequence is an insulin-selective analogue of anglerfish somatostatin-28, which is more potent than somatostatin-14 or somatostain-28 in inhibiting insulin secretion for treatment of insulinoma.

(Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Angler fish somatostatin-28 and analogue and fragment inhibiting insulin secretion in insulinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 83; DB 7;
Pred. No. 5.3e-06;
); Mismatches 1
                                                                                                                                                              Somatostatin-28; insulin-selective; insulinoma
                                                                                                                                                                                                                                                                                                                                                                                                                 (SALK ) SALK INST BIOLOGICAL STUDIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Somatostatin-28; insulin-selective;
                                                                                                                                                                                                                    Location/Qualifiers
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                            AAP60190 standard; protein; 14 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAP61714 standard; Protein; 28 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 4; Page 18; 19pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          th 93.3%;
Similarity 92.9%;
13; Conservative
                                                                                                                                                                                                                                                                                                                                        85EP-0305867
                                                                                                                                                                                                                                                                                                                                                                    84US-0646610
87US-0033295
                                                                                                                                                                                                                                                     /label- Hyl
                                                                                     (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 AGCKNFYWKGFTSC 14
                                                                                                                                Somatostatin-28 analogue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Somatostatin-28 analogue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 AGCKNEYWXGFTSC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Noe BD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14 AA;
                                                                                                                                                                                                                         Key
Modified-site
                                                                                   25-MAR-2003
28-JUL-1991
                                                                                                                                                                                                                                                                                                                                        16-AUG-1985;
                                                                                                                                                                                                                                                                                                                                                                   31-AUG-1984;
01-APR-1987;
                                                                                                                                                                                                                                                                                                             05-MAR-1986.
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28-JUL-1991
                                                                                                                                                                                                                                                                                EP173527-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Spiess J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAP61714;
                                                         AAP60190;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 13
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RESULT 5
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hexose having the
are not all H"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "May be opt. substd. by H or a hexose or
aminohexose moiety modified in the 2-position
with an amide group, the hexose having the
pyranose structure; R1-R4 are not all H"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     May be opt. substd. by H or a hexose or aminohexose moiety modified in the 2-position with an amide group, the hexose having the pyranose structure; R1-R4 are not all H"
            or somatostatin
                                       are useful
diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "May be opt. substd. by H or a hexcaminohexose molety modified in the with an amide group, the hexose he pyranose structure; R1-R4 are not
                                                                                                                                     Length 14;
                                                                                                                                                                                                                                                                                                                                                                                                                 dlucose;
                                                   in.
                                                    and
                        for
                                   growth hormone, angiopathy a
                                                                                                                                         DB 2; 1
.3e-05;
                        formula
                                                                                                                                                                                                                                                                                                                                                                                                               molety; pentose; hexose; pyranose;
                                                                            correct PR fleid.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             - R4
- May be opt. substd. Paminohexose moiety movith an amide group, pyranose structure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           umide group, structure;
                                                                                                                                      DB
                  generic
of arout
                                 lvs. which inhibit secretion of grat diabetes mellitus, acromegaly, AAP10308-P10348.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
5
                                                                                                                                      Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                  analogue
                                                                                                                                                                                                                                                                                                14 AA
                     of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "May be
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                                                                                                                                   Query Match
Best Local Similarity 85.7%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                             AAP10421 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      79US-0092647
                        example
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                                                                                                                                                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                  glycosylated
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/label-
/note= "
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/label-
/note-"
                                                                                                                                                                                            1 AGCKNFYWKGFTSC
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/label-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
Modified-site
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                    This peptide
derivs. which
treat diabete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                  Somatostatin
                                                                                                                                                                                                                                                                                                                                                                                                              Carbohydrate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-NOV-1979;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-NOV-1979;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US4280953-A.
                                                                                                                                                                                                                                                                                                                                                      17-DEC-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-JUL-1981
                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1981
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                                                                         (Updated
                                                                                                        Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI;
                                                                See
                                                                                                                                                                                                                                                                 RESULT 9
       *888888×8
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                                                                                                                                                                                                                       QQ
                                                                                                                                                                                                                                                 14 is useful
aSS-28 may
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                                                                                                                                                                                                                                   The
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                                                                                                                                                                                                                                                                                          in the disulphide claimed.
                                                                                                                                                                                                                                      .nsulinoma.
                                                                                                                                                                                                                                      . aSS-14
                                                                                                                                                                                                                                                                             influencing
                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Growth Hormone secretion; GH; diabetes mellitus; angiopathy
                                                                                                                                                                                                                                                                                                                                                                                Length 28;
                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                              It is called aSS-28 because it is an analogue of angle (SS-28). It is more potent than either somatostatin 14 at inhibiting insulin secretion for the treatment of 14-residue C-terminal peptide is also claimed (aSS-14 for inhibiting insulin secretion by the pancreas. aSS be useful for decreasing gastric acid secretion and in thermoregulation. Their reduced linear forms, wherein bridge is not present and is replaced by H, is also coppared on 25-MAR-2003 to correct PA field.)
                                                                                                                             Angler fish somatostatin-28 and fragments - useful in inhibiting insulin secretion and insulinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             treating dia
                                                                                                                                                                                                                                                                                                                                                                           Score 83; DB 10;
Pred. No. 1e-05;
); Mismatches 1
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                                          (SALK ) SALK INST BIOLOGICAL STUDIES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAP10324 standard; peptide; 14 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Page 6; 8pp; German.
                                                                                                                                                                      Claim 1; page 65; 8pp; English
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87US-0033295.
84US-0646610.
                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 92.9%;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Somatostatin derivs. prodn. acromegalia and anglopathy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80CH-0125375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84CA-0446545
                                                                                                                                                                                                                                                                                                                                                                                                                                  (updated)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diagnosis.
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                                                                                                 WPI; 1989-113910/15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1981-21515D/13
                                                                       Noe BD;
                                                                                                                                                                                                                                                                                                                                                  28 AA;
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Modified-site
01-APR-1987;
31-AUG-1984;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-FEB-1981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-SEP-1980;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acromegaly;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-2003
15-DEC-1992
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AAP1032
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Sequence

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Length 14;
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    No. 4.3e-05;
smatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 to add missing OS fle
to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 77;
Pred. No.
                                                                                                                                                                                                                                                                                                                                               synthetic somatostatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Polypeptide prodn. by genetically form of cleavable conjugate with
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (07104K).
                                                                                                                                                                                                                                                                                                                                                                                    heterologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86.5%;
illarity 85.7%;
Conservative
                                                                                                                                                                                               Protein;
  Similarity 85.7%;
12; Conservative
                                                                                                                                                                                                                                                                     (updated)
(updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic somatostatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-AUG-2002
25-MAR-2003
                                                                                               AGCKNFFWKTFTSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AGCKNFYWKGFTSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1983-07104K/03
N-PSDB; AAN30312.
                                                                                                                                                                                              AAP30668 standard;
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12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAP40316 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-NOV-1979;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-SEP-1985;
                                                                                                                                                                                                                                                                                                                                                   Sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                              US4366246-A
                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                  AAP30668;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Riggs AD;
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
      Best Local
Matches
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                                                                                                                                                         RESULT 11
AAP30668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAP40316
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                                                                                                                                      ituitary,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     expressed
                                                                                    This sequence has an extended biological half-life companative somatostatin and some of its analogues. It has a acting inhibitory effect on growth hormone secretion by secretion of glucagon and insulin by the pancreas and sevasoactive intestinal polypeptides, secretin, gastrin an It has a similar inhibitory efficiency to native somatos increased acting inhibitory effect of this peptide is duinclusion of a carbohydrate moiety in to the somatostati This carbohydrate moiety can be linked to either Ser, As which appear in the somatostatin peptide chain. Convent carbohydrate moieties for incorporation are the pentose monosaccharides, particularly those having the pyranose such as glucose and fructose.
                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Recombinant microbial cloning vehicle - for expression polypeptide(s), esp. hormones such as somatostatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
Somatostatin glycosylated analogues - with prolonged and similar activities and potency to somatostatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The sequence represents somatostain, which may be after synthetic gene expression in microorganisms (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                  Score 77; DB 2; L. Pred. No. 4.3e-05; 1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 77;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 10
AAP20165
ID AAP20165 standard; Protein; 14 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Fig 2; 23pp; English.
                                                      Claim 1; Page 11; 13pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 85.7%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                79US-0091334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     85US-0780734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 AGCKNFYWKGFTSC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 AGCKNFFWKTFTSC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1982-97410E/45
N-PSDB; AAN20160.
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Somatostatin

25-MAR-2003 15-SEP-1992

Somatostatin

US4356270-A.

Synthetic:

26-OCT-1982.

05-NOV-1979;

26-SEP-1985;

Itakura K;

Sequence

Query Match

.rag

-739b-2

us-09-727

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rotein is comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            somatostatin; cloning vehicle; beta-galactosidase; vaccine; radioimmunoassay;
                                                                                                                                                                                                                                                         nventors claim a transformant bacterial culture cloned from more bacteria, each comprising a recombinant microbial s. The vehicle comprises: (regulon)-(codons for additional codons for desired heterologous polypeptide)-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                polypeptide
                                                                                                                                                                                                                                                                                                                                                                                      ous protein
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                                                                                                                                                                                                                                                                                                                                                             ugates
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                                                                                                                                                                                                                                                                                                                                                                                                                                and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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                                                                                                                                from bacteria - for linked to protein
                                                                                                                                                                                                                                                                                                                                                                                                              al cultu
The DNA
                                                                                                                                                                                                                                                                                                                                                                                     heterolog
                                                                                                                                                                                                                                                                                                                                                                                                                                                              the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 77; DB 5;
Pred. No. 4.3e-05;
; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                               Bacterial
                                                                                                                                                                                                                                                                                                                                                                                                                               SMO1) and pSOM11 are claimed. T
in this patent application are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             to add missing OS
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                                                                                                                                                                                                                                                                                                                                                                such
                                                                                                                                  : bacterial culture cloned
to give somatostatin etc.
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1 04K/03).
insulin.
                                                                                                                                                                                                           23pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1;
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77US-0849591.
79US-0090980.
85US-0787871.
                                                                                                                                                                                                                                                                                                                                                       termination codon(s)). Proescribed in US4366246 (071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sh 86.5%;
Similarity 85.7%;
12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82US-0403676
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AAP60863
ID AAP60863 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                               or human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (updated)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 AGCKNFYWKGFTSC
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N-PSDB; AAN60778.
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                                                         WPI; 1984-056011/09
N-PSDB; AAN40292.
                                                                                                                                                                                                          5;
                                                                                                                                                                                                                                                                                                                                                                  Lope sometostatin (E. coll RRI (re-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14 AA;
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                                                                                                                                                                                                        Disclosure; Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic gene;
fusion protein;
                                                                                                                                                                                                                                                            inventors
                                                                                                                                Transformant cultivation t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Somatostatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JUL-1982;
08-NOV-1977;
05-NOV-1979;
16-OCT-1985;
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                                                                                                                                                                                                                                                                                one or more vehicle. The protein) -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-OCT-2002
05-JUL-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-JAN-1986
            Riggs AD;
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Best Local S
Matches 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GETH)
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The
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                              Growth hormone inhibitor; insulin inhibitor; glucagon acromegaly therapy; pancreatitis; insulin-dependent d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                             Sequence encoded by synthetic gene for somatostatin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The inventors claim a recombinant microbial cloning expression of polypeptide. Plasmids pSOM 1 and pSOM polypeptide is expressed from a synthetic gene, and somatostatin e.g. described in US3904594.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Recombinant microbial cloning vehicle - esp. useful expression of polypeptide e.g. somatostatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 77; DB 5; L
Pred. No. 4:3e-05;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Protein conjugate; transformed bacteria; plasmid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence encoded by synthetic somatostatin gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Fig 2; 23pp; English.
                                                                                                                                                                                                                                                                                                                                                                          82US-0403674.
77US-0849591.
79US-0090980.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 85.7%;
Matches 12; Conservative
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                                                                                                                                                                                                                                                                                                                            82US-0403674
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77US-0849591
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(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GETH ) GENENTECH INC.
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   (first
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N-PSDB; AAN40257.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14 AA;
                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                        30-JUL-1982;
08-NOV-1977;
05-NOV-1979;
                                                                                                                                                                                                                         US4425437-A:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US4431739-A.
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08-NOV-1977;
                                                                                                                                                                                                                                                                        10-JAN-1984.
                                                                                                                                                                                                                                                                                                                           30-JUL-1982;
11-FEB-1992
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03-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Riggs AD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 13
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Gaps

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AGCKNFYWKGFTSC 14
                                                                          Similarity 12; Conserv
                                                             Query Match
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The somatostatin is encoded by a synthetic gene, whice cloning vector. The vector also comprises a regulon, termination codons, and a DNA sequence encoding an adeg beta-galactosidase. Somatostatin is expressed as which can be cleaved with CNBr to give the two protein incorporation of somatostatin into a fusion prod. profin vivo degradation by endogenous enzymes. Alternation protein can be used to raise antibodies for RIA, or incorporation of somatostation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             trea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This somatostatin deriv. has the same activity as natistatin but has a more specific and longer lasting act useful in the treatment of diabetes and gastrointestiat a dosage of 0.05-0.2 mg/kg.
(Updated on 09-JAN-2003 to add missing OS field.)
                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gastrointestinal disorders.
                                                                                                                                               vaccines. (Updated on 31-OCT-2002 to add missing OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for
                                                                                                                                                                                                                                      Score 77; DB 7; L
Pred. No. 4.3e-05;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New N-acylated somatostatin derivs. - useful diabetes and gastrointestinal disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ...1
'label- N-acylated alanine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9..9
/label- N-acylated lysine 3..14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
AAP70928
'D AAP70928 standard; protein; 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-acylated somatostatin deriv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; page 1; 3pp; German.
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                                                                                                                                                                                                                                  Query Match
Best Local Similarity 85.7%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (updated)
(updated)
(first entry)
                                                                                                                                                                                                                                                                                                            1 AGCKNFYWKGFTSC 14
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1 AGCKNFFWKTFTSC 14
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/label-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              diabetes;
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                                                                                                                                                                                                     14 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unidentified
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09-JAN-2003
12-MAR-1991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-JAN-1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAP70928;
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Search time 13.641 Seconds (without alignments) 134.451 Million cell updates/sec
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1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:
2: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.
4: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.
5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep.
6: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep.
7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep.
8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep.
9: /cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep.
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11: /cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep.
12: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.p.
13: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.p.
14: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep.
15: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep.
16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep.
17: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep.
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Compugen Ltd.
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GenCore version
Copyright (c) 1993 - 2003
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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89
1 AGCKNFYWKGFTSC 14
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Maximum DB seq length: 200000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -Scoring table:
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                                                                                                                                                                                                                                                                Run on:
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Pred. No. is the number of results predicted by chance to score greater than or equal to the score of the result bei and is derived by analysis of the total score distribution

SUMMARIES

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Description	Sequence 2 Appli	, ,	18	37	52.	3. AD	٠,	Sequence 64. Appl	. ~	B. App	8	σ	23		7, Ap	
DB ID	10 US-09-316-505-2	12 US-10-224-640-2	12 US-10-251-703-18	14 US-10-101-487-37	14 US-10-101-487-52	9 US-09-766-396-3	14 US-10-062-375-3	9 US-09-280-030-64	14 US-10-101-487-53	9 US-09-766-396-8	14 US-10-062-375-8	15 US-10-221-841-9	9 US-09-766-396-23	14 US-10-062-375-23	9 US-09-766-396-7	
Length D	14	14	14	14	15	110	110	140	200	. 14	. 14	. 14	15	15	53	
& Query Match		86,5	86.5	. 86.5	86.5	86.5	86.5	86.5	86.5		70.8		70.8	70.8	70.8	•
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Similarity 12; Conserv

Query Match Best Local Si Matches 12;

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RESULT 2 US-10-224-640-2 ; Sequence 2, Application US/10224640 ; Publication No. US20030139348A1

equence 11, Sequence 7, Sequence 11, equence 10, equence 10, equence 6, A Sequence 5, equence 2, A Sequence 2, Sequence 2, Sequence 2, Sequence 4, Sequence 4, Sequence 4, Sequence 4,	Sequence 2, Appliance 2, Appliance 2, Appliance 13, Appliance 13, Appliance 13, Appliance 13, Appliance 13, Appliance 130, App		GROWTH HORMONE SECRETAGOG
and the second s			MIMETIC.
2 - 396 - 1 3 - 396 - 1 3 - 375 - 2 3 - 375 - 2 3 - 375 - 2 3 - 375 - 2 5 - 125 - 2 5 - 125 - 2 5 - 125 - 2 6 - 2 7 - 954 - 2 8 - 954 - 2	US-10-335-12 US-10-335-12 US-10-137-87 US-10-140-01 US-10-140-27 US-10-140-80 US-10-140-92 US-10-140-92 US-10-140-92 US-10-141-69 US-10-141-69 US-10-141-69	ALIGNMENTS 16505 S.	ULAR WEIGHT PEPTIDOMIMET \$209/316,505 -21 09/057,074
000440000242001 011010101011110		/093 P. en A ert s E. C. S. S.	1.EC - 05 - 08 - 08
11110098888877711		ion US/(1461A1 John P. Ross G. Rathleer Kathleer Thomas Todd C.	2 ER
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	000000000000000000000000000000000000000	ULT 1 09-316-505- equence 2, atent No. U ENERAL INFO APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT:	
114 117 118 119 119 129 129 129 139	3 E E E E E E E E E E E E E E E E E E E	RESULT 1 US-09-316-9 Sequence Patent NC GENERAL 1 APPLICAN APPLICAN APPLICAN APPLICAN APPLICAN APPLICAN	TITLE OF FILE RECORRENT CURRENT CURRENT PRIOR PRIOR FOR MABER SEQ ID NOT TYPE: 17YPE: 15-09-316-15-15-15-15-15-15-15-15-15-15-15-15-15-

-739b-2.rapb

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R JR., DAVID W. RECOMBINANT PRODUCTION OF POLYANIONIC POLYMERS AND USES
                                                                                                                                                     WAGGONER JR., DAVID W.
NVENTION: RECOMBINANT PRODUCTION OF POLYANIONIC POLYMERS AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION: Description INFORMATION: motif -487-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Description US-10-101-487-52
                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
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12; Conser
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Sequence 18, Application US/10251703

Publication No. US20030148449A1

GENERAL INFORMATION:

APPLICANT: Covic, Lidija

TITLE OF INVENTION: G Protein Coupled Receptor Agonists and
TITLE OF INVENTION: Methods of Activating and Inhibiting G

TITLE OF INVENTION: Receptors Using the Same
FILE REFERENCE: NEMC-215 CIP

CURRENT APPLICATION NUMBER: US/10/251,703

CURRENT FILING DATE: 2002-09-20

PRIOR PILING DATE: 2001-04-23

PRIOR FILING DATE: 2000-04-21

NUMBER OF SEQ ID NOS: 41

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 18

LENGTH: 14
          APPLICANT: Burnier, John P.
APPLICANT: Clark, Ross G.
APPLICANT: Clark, Ross G.
APPLICANT: Elias, Rathleen A.
APPLICANT: Elias, Rathleen A.
APPLICANT: Bawson, Thomas E.
APPLICANT: Rawson, Thomas E.
APPLICANT: Scanley, Mark S.
TITLE OF INVENTION: LOW MOLECULAR WEIGHT PEPTIDOMIMETIC GRC
FILE REFERENCE: PO850D2C1
CURRENT APPLICATION NUMBER: US/10/224,640
CURRENT APPLICATION NUMBER: US 09/057,074
PRIOR FILING DATE: 1998-04-08
PRIOR FILING DATE: 1994-11-16
PRIOR FILING DATE: 1999-05-21
WILLING DATE: US 09/316,505
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ore 77; DB 12;
ed. No. 4.4e-05;
Mismatches 1;
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Best Local Similarity 85.7%;
Matches 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homosapiens
'S-10-224-640-2
GENERAL INFORMATION: APPLICANT: Burnier.
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Best Local
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RESULT 4 US-10-101-487-37

Length 15;

Sequence: Synthetic peptide

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                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/766,396
FILING DATE: 18-Jan-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/857,389
FILING DATE: <Unknown>
ATTORNET/AGENT INFORMATION:
NAME: Schmonsees, William
REGISTRATION NUMBER: 31,796
REFERENCE/DOCKET NUMBER: 22908-0002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0638
TELEFRAX: (415) 324-0638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Inde
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                                                                     AL INFORMATION:
APPLICANT: Sutcliffe, Gregor J.
de Lecea, Luis
Siggins, George R.
Henriksen, Steven J.
TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
COMPOSITIONS AND METHODS
                                                                                                                                                                                                            NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESS:
ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020013456Alth Torrey
CITY: La Jolla
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 3, Application US/10062375
Publication No. US20020133000A1
GENERAL INFORMATION:
APPLICANT: Sutcliffe, Gregor J.
de Lecea, Luis
Siggins, George R.
Henriksen, Steven J.
TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
COMPOSITIONS AND METHODS
NUMBER OF SEQUENCES: 26
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CORRESPONDENCE ADDRESS:
ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020133000A1th Torrey
CITY: La Jolla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 77; DB 9;
Pred. No. 0.00027;
1; Mismatches 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 110 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: C-terminal
SEQUENCE DESCRIPTION: SEQ ID NO
                                  Sequence 3, Application US/09766396
Patent No. US20020013456A1
GENERAL INFORMATION:
APPLICANT: Sutcliffe, Gregor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1;
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Best Local Similarity 85.7%;
Matches 12; Conservative
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RESULT 6
US-09-766-396-3
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INVENTION: DNAS ENCODING NEW FUSION PROTEINS INVENTION: PREPARING USEFUL POLYPEPTIDES THRO
APPLICATION NUMBER: US/10/062,37 FILING DATE: 30-Jan-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MBER: US/09/280,030A
999-03-26
                                                                                                                                                                                                                                                                                                     FRAGMENT TYPE: protein
FRAGMENT TYPE: C-terminal
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
                                                                    NUMBER: US/08/857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , Application US/09280030A US20010021515A1
                                                                                                                                                                                        324-70,
324-0638
                                                                                                  INFORMATION
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ORGANISM: Artificial Sequence
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85.7%;
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                                      CLASSIFICATION
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                                                                                                                                                                     TELECOMMUNICATION
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Gaps

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Length 140;

Score 77; Pred. No.

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CURRENT APP
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US-09-766-396-8
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                                                                                                                                                                                       APPLICANT: LEUNG, DAVID W.
APPLICANT: LEUNG, DAVID W.
APPLICANT: BERGMAN, PHILIP A.
APPLICANT: LOFQUIST, ALAN
APPLICANT: TOFFOURT GREGORY E.
APPLICANT: TOMPKINS, CHRISTOPHER K.
APPLICANT: WAGGONER JR., DAVID W.
TITLE OF INVENTION: THEREOF
TITLE OF INVENTION: THEREOF
FILE REFERENCE: 077319/0329
CURRENT APPLICATION NUMBER: US/10/101,487
CURRENT FILING DATE: 2002-03-20
PRIOR FILING DATE: 2001-03-21
NUMBER OF SEQ ID NOS: 116
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 53
LENGTH: 200
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
PatentIn Release #1.0, Version #1.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Description of Artificial Sequence:
; OTHER INFORMATION: protein
US-10-101-487-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 8, Application US/09766396

Sequence 8, Application US/09766396

GENERAL INFORMATION:

APPLICANT: Sutcliffe, Gregor J.

de Lecea, Luis

Siggins, George R.

Henriksen, Steven J.

TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,

COMPOSITIONS AND METHODS

NUMBER OF SEQUENCES: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020013456A1th Torrey
CITY: La Jolla
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 77; DB 14;
Pred. No. 0.00046;
1; Mismatches 1.
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APPLICATION NUMBER: US/09/766,396
FILING DATE: 18-Jan-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                              RESULT 9
US-10-101-487-53
; Sequence 53, Application US/10101487
; Publication No. US20020169125A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Artificial Sequence
Query Match
Best Local Similarity 85.7%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: US
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Flopp
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OPERATING
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US-09-766-396-8
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THE SCRIPPS RESEARCH INSTITUTE 66 No. US20020133000Alth Torrey
                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/10, FILING DATE: 30-Jan-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFOR
                                                                                                 La Jolla
California
                                                                                                                                                                                                         COMPUTER: IBM PC OPERATING SYSTEM:
TITLE OF INVENTION:
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-09-727-739b

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INFORMATION FOR SEQUENCE C
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Sequence 9, Application US/10221841

GENERAL INFORMATION:

APPLICANT: HINUMA, Shuji

TITLE OF INVENTION: NO. US20030082648Alel mas-like Receptor
FILE REFERENCE: 2700 USOP

CURRENT APPLICATION NUMBER: US/10/221,841

CURRENT APPLICATION NUMBER: PCT/JP01/02053

PRIOR FILING DATE: 2001-03-15

PRIOR FILING DATE: 2000-03-17

PRIOR FILING DATE: 2000-03-17

PRIOR FILING DATE: 2000-12-11

NUMBER OF SEQ ID NOS: 9
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ZIP: 92037

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/766,396

FILING DATE: 18-Jan-2001

CLASSIFICATION: <UNKnown>
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de Leces, Luis
Siggins, George R.
Henriksen, Steven J.
TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES
COMPOSITIONS AND METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
STREET: 10666 No. US20020013456Alth Torrey
CITY: La Jolla
STATE: California
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ed. No. 0.0051;
Mismatches
                                             Score 63; DB 14
Pred. No. 0.0051
2; Mismatches
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Pred. No.
   ID NO:
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75.0%;
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nilarity 75.0%;
Conservative
SEQUENCE DESCRIPTION: US-10-062-375-8
                                                             Similarity 75.09; Conservative
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2 CKNFFWKTFSSC 13
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Sequence 23, Application U
Patert No. US20020013456A1
GENERAL INFORMATION:
APPLICANT: Sutcliff
                                                                                                                               2 CKNFFWKTFSSC
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ZIP: 92037
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Best Local Similarity
Matches 9; Conser'
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; ORGANISM: Rat
US-10-221-841-9
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-221-841-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 9
LENGTH: 14
                                             Query Match
Best Local
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US-09-766-
                                                                              Matches
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US-10-2
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E: THE SCRIPPS RESEARCH INSTITUTE 10666 No. US20020133000Alth Torrey Pines Road,
                                                          IER: 31,796
NUMBER: 22908-0002
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NUMBER: 22908-0002
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Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER: US/10/062,37:
30-Jan-2002
                                                                                                                                                                                                                                                                                              Score 63; 1
Pred. No. 0
2; Mismatch
08/857,389
                                                                                          INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/10062375
40. US20020133000A1
                                                                                                                      324-0638
                                                                                                                                                                                                        HOLECULE TYPE: protein FRAGMENT TYPE: C-terminal SEQUENCE DESCRIPTION: SEQUEN-09-766-396-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION
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larity 75.0%;
Conservative
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                                                                                          TELECOMMUNICATION
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Publication No. US200;
GENERAL INFORMATION
APPLICANT: Sut
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Best Local Similarity
Matches 9; Conser
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RESULT 15
US-09-766-396-7
Sequence 7, Application US/09766396
Sequence 7, Application US/09766396
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Sutcliffe, Gregor J.
GENERAL INFORMATION:
CENTISTATION:
Henriksen, Steven
COMPOSITIONS AND METHODS
CORRESPONDENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
CITY: La Jolla
STATE: California
COUNTRY: US
ZIP: 92037
ZIP: 92037
                                                                                                     Ind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

COMPUTER: IBM PC. compatible

COMPUTER: IBM PC. compatible

SOFTWARE: Patentin Release #1.0, Version #1.

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/766,396

FILING DATE: 18-Jan-2001

CLASSIFICATION NUMBER: 08/857,389

FILING DATE: <URKNOWN>

APPLICATION NUMBER: 31,796

FILING DATE: <URKNOWN>

ATTORNEY/AGENT INFORMATION:

FELEPHONE: (415) 324-7041

FELEPHONE: (415) 324-0638

INFORMATION FOR SEQ ID NO: 7:

SEQUENCE CHARACTERISTICS:

LENGTH: 29 amino acids

TOPOLOGY: linear

MOLECULE TYPE: maino acids

FRAGMENT TYPE: C-terminal

SEQUENCE DESCRIPTION: SEQ ID NO: 7:

SEQUENCE DESCRIPTION: SEQ ID NO: 7:

SEQUENCE TYPE: Erotein

FRAGMENT TYPE: C-terminal
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                                                                  Score 63; DB 14;
Pred. No. 0.0054;
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Pred. No. 0.0096
}; Mismatches
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Job time : 13.641 secs
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TYPE: C-terminal DESCRIPTION: SEQ
                                                               Query Match
Best Local Similarity 75.0%;
Matches 9; Conservative
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ilarity 75.0%;
Conservative
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17 CKNFFWKTFSSC 28
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Best Local Similarity
Matches 9; Conser
; FRAGMENT; SEQUENCE
US-10-062-375-23
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# GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

- protein search, using sw model OM protein

Run on:

updates/sec August 13, 2003, 14:47:57; Search time 8.97436 Seconds (without alignments) 150.023 Million cell updates,

US-09-727-739B-2 89 1 AGCKNFYWKGFTSC 14 Perfect score: Sequence: Title:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283308 seqs, 96168682 residues Searched:

283308 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 08 Maximum Match 1008 Listing first 45 summaries

PIR_76:*.
1: piri:*
2: pir2:*
3: pir3:*
4: pir4:* Database :

Pred. No. is the number of results predicted by change score greater than or equal to the score of the resuland is derived by analysis of the total score distril

## SUMMARIES

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		Description	somatostatin-25	tatin I	tin I	tatin II	tostatin II	tatin-25	somatostatin - sli	somatostatin I - c	somatostatin I - E	somatostatin I - s	somatostatin-28 -	somatostatin-relat	in I pr	1n-14	preprosomatostatin	somatostatin-14.pr	H	tin I	somatostatin precu	somatostatin precu	somatostatin precu	somatostatin precu	somatostatin I pre	somatostatin, panc	somatostatin - spo	somatostatin-14 [P	cortistatin precur	11ke	somatostatin-22 pr
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des: 1-10;11-45;46-73 <CON>
three peptides which probably originate from a common precursor, amily: somatostatin

rus: glycoprotein; neuropeptide; pancreatic islet Product: peptide F1 #status experimental <PF1> /Product: peptide F3 #status experimental <PF3> /Product: peptide F2 #status experimental <PF2> /Disulfide bonds: #status experimental

iatin II precursor - European flounder (tentative sequence) (fragments)
is: Platichthys flesus (European flounder)
07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 31-Mar-2000

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RESULT 1										
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somatostatin	n-25	coho	salmon							
N; Alternate	names	Oma	О		II precursor					
C; Species: (	Oncor	hynchus k	kisutch		Ö	( u				
C; Date: 30-	Sep-1	-		)	n 30	-1993	#text_change	07 - May	-1999	
C; Accession	: A60		0842							
R; Plisetskaya, E.M.;	ya, E	.M.; Poll	ock,	H.G.	; Rouse,	J.B.; Hamilton,	on, J.W.;	Kimmel,	1, J.R.;	; Andre
Gen. Comp.	Endoc	굯	, 25	2-2						•
A; Title: Characteriz	aract	8	o.	Coho	salmon	a s	kisutch)	islet	somatostatins	tatins.
A; Reference	dunu	er: A608	42;	MOID	:87055212;	PMID: 2877919		•		
A; Accession	: A60842						-			
A; Molecule	type: I	protein	c			•	. '			
A; Residues:	1-25	<pli></pli>					•			
A; Accession	09D :	842					•			
A, Molecule t	type: I	Λ.								
A; residues:	7-71	2 <pl2></pl2>			-	•				
A; Note: this	or s	m, soma	tostatin		II, was not	sednenced	directly b	but rat	rather ded	deduced fr
C; Superramily	Ly: s	Iy: somatostati	atin		1 1 1					
C; Keywords:	moru.	ione; pa	ncreatic		Siet		į			
F; 12-25/Product	loct:	somatosta .somatost	statin-25 ostatin I	H	#status exp #status ex	experimental <mati experimental <mat< td=""><td>MAT1&gt; <mat2></mat2></td><td></td><td></td><td></td></mat<></mati 	MAT1> <mat2></mat2>			
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hydroxylysine-conta
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                                                                                                                                                                                                                                                                                    e analysis of cDNAs encoding MUID:81052423; PMID:6107860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3-125 <SPI>
2.; Nichols, R.; Dixon, J.E.
262, 12692-12699, 1987
translational processing of preprosomatos mber: A27376; MUID:87308304; PMID:2887572
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(Lys) (part
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Pred.
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92.9%;
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141, 1980
and sequence
er: A93236; MU
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C; Species: Oncorhynchus mykiss (rainbow trout)
; Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_chang
; Accession: I51064

R; Moore, C.A.; Kittilson, J.D.; Dahl, S.K.; Sheridan, M.A.
Gen. Comp. Endocrinol. 98, 253-261, 1995

A; Title: Isolation and characterization of a cDNA encoding for
A; Reference number: I51064; MUID: 95354921; PMID: 7628684

A; Reference number: I51064

A; Reference number: I51064

A; Reference number: I51064

A; Reference number: I51064; MUID: 95354921; PMID: 7628684

A; Reference number: I51064

A; Reference number: I51064; MUID: 95354921; PMID: 7628684

A; Ccession: I51064

A; Residues: I-115 < MOO>
A; Residues: I-115 < MOO
                                                                                                                                                                                                                                                                                                                                                              Succession I precursor - shorthorn sculpin (tentative sequence, Species: Myoxocephalus scorpius (shorthorn sculpin, daddy sciences: Myoxocephalus scorpius (shorthorn sculpin, daddy sciences: 07-Sep-1990 #sequence_revision 26-Jan-1996 #text_changy (JACCESSION: SOU166; A26993
R;Conlon, J.M.; Davis, M.S.; Falkmer, S.; Thim, L.
Eur. J. Blochem. 168, 647-652, 1987
A;Title: Structural characterization of peptides derived from JACCESSION: SOU166; MUID: 88029486; PMID: 2889597
A;Title: Structural characterization of peptides derived from JACCESSION: SOU166
A;Molecule type: protein
A;Reference peptides which probably originate from a common JACCESSION: Carne, A.; Cutfield, J.F.
FEBS Lett. 214, 57-61, 1987
A;Title: The amino-acid sequences of sculpin islet somatostatin A;Reference number: A91376; MUID: 87190954; PMID: 2883025
A;Molecule type: protein
A;Residues: 47-74 <CUT>
C;Superfamily: somatostatin
C;Keywords: glycoprotein; neuropeptide; pancreatic islet
F;1-12/Product: peptide S1 #status experimental <PS3>
F;1-12/Product: peptide S2 #status experimental <PS3>
F;63-74/Disulfide bonds: #status experimental
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100.0%; Score 89; DB 2; Best Local Similarity 100.0%; Pred. No. 5.7e-07; Matches 14; Conservative 0; Mismatches 0;
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  Score 89; DB 2;
Pred. No. 3.7e-07,
); Mismatches 0
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th 100.0%; Similarity 100.0%; 14; Conservative (
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f a somatostatin-like polypeptide from ovin PMID: 7225368
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                                                                                                                                                                                                                      tides derived PMID: 2889597
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17-Jul-1994
                                                                                                                                                                         Thim, L
                                                                                                                                                                             J.M.; Davis, M.S.; Falkmer, S.; Thim, I tochem. 168, 647-652, 1987
Structural characterization of peptides ce number: S00166; MUID:88029486; PMID:
                                                                                                                                                                                                                                                                                                                                                                                              Score 77; DB Pred. No. 6e-01; Mismatches
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1; Mismatc
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neuropeptide; pancreatic
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ilarity 85.78;
Conservative
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12; Conservative
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Product: somatostatin-28
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AGCKNFFWKTFTSC
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Lmary structure on
number: A61344;
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Disulfide bonds:
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les 12; Conser
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ccession: A61344
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Matches
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C; Species: Oncorhynchus kisutch (coho salmon)
C; Species: Oncorhynchus kisutch (coho salmon)
C; Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 07-C; Accession: B60842
R; Plisetskaya, E.M.; Pollock, H.G.; Rouse, J.B.; Hamilton, J.W.; Kigen. Comp. Endocrinol. 63, 252-263, 1986
A; Title: Characterization of Coho salmon (Oncorhynchus kisutch) islan; Reference number: A60842; MUID: 87055212; PMID: 2877919
A; Reference rotein
A; Residues: 1-14 <PLI>C; Superfamily: somatostatin
C; Keywords: hormone; pancreatic islet
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                                                         ande
  Somatostatin - slider turtle

Somatostatin - slider turtle

C; Species: Pseudemys scripta (slider)

C; Species: 11-Feb-1993 #sequence_revision 11-Feb-1993 #text_chang

C; Accession: C60414

R; Conlon, J.M.; Hicks, J.W.

Peptides 11, 461-466, 1990

A; Title: Isolation and structural characterization of insulin,

Peptides 11, 461-466, 1990

A; Reference number: A60414; MUID: 90341082; PMID: 1974347

A; Reference number: Drotein

A; Residues: 1-14 <CON>

S; Superfamily: somatostatin

C; Reywords: neuropeptide
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N; Alternate names: somatostatin-14
C; Species: Anguilla anguilla (European eel)
C; Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_chang
C; Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_chang
C; Accession: A60840
R; Conlon, J.M.; Deacon, C.F.; Hazon, N.; Henderson, I.W.; Thim
Gen. Comp. Endocrinol. 72, 181-189, 1988
A; Title: Somatostatin-related and glucagon-related peptides wi
A; Reference number: A60840; MUID: 89065329; PMID: 2904391
A; Reference number: A60840
A; Molecule type: protein
A; Residues: 1-14 <CON>
C; Superfamily: somatostatin
C; Keywords: hormone; pancreatic islet
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Pred No. 6e-06;
1; Mismatches 1; Inde
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Best Local Similarity 85.7%; Pred. No. 6e-06;

Matches 12; Conservative 1; Mismatches 1; Inde
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Matches 12; Conservative 1; Mismatches
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Matches 12; Conservative
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1 AGCKNFFWKTFTSC 14
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10377, 1982
cloned DNA complementary to catfish pancreatic
; MUID:82265698; PMID:6179939
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85.7%;
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C; Keywords: neuropeptide
F; 1-24/Domain: signal sequence
F; 25-100/Domain: propeptide #st
F; 101-114/Product: somatostatin
F; 103-114/Disulfide bonds: #sta
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                                                                                                                                                                                                                                                                                                     C.D.; raylor, W.L.;
Chem. 257, 10372-10:
The structure of clonce number: S00292; N
                                                                                                                                                                                                                                                                                                                                                                                                          tl. Acad. Sci. U.S.A. Sequence analysis on number: A93897;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     olecule type: mRNA
esidues: 82-108 <TAY>
ross-references: GB:J
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                                                                                                                                                                                                                                                                                                                                                    tatin gene
                                                                                                                                                                                                                                              C; Accession: A32271
R; Conlon, J.M.; Askensten, U.; Falkmer, S.; Thim, L.
Endocrinology 122, 1855-1859, 1988
A; Title: Primary structures of somatostatins from the islet
A; Reference number: A32271; MUID: 88195948; PMID: 2896118
A; Accession: A32271
A; Molecule type: protein
A; Residues: 1-34 <CON>
C; Superfamily: somatostatin
C; Keywords: neuropeptide
                                                                                                                               Length
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21 AGCKNFFWKTFTSC 34
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Matches 12
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PIDN:CAA23877..., Weith, H.L.

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nnel catfish) ion 31-Dec-1993 #text; ; A01435

catfish

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Length 114;

A; Title: Somatostatins of the channel catfish.
A; Reference number: I50798; MUID:85303576; PMID:2863931
A; Accession: I50798
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: mRNA
A; Residues: 1-114 < DIX>
A; Cross-references: GB:M25903; NID:g213339; PIDN:AAA49339.
C; Superfamily: somatostatin

Score 77; DB 2; Length Pred. No. 4.3e-05; 1; Mismatches 1; Ind Ouery Match Best Local Similarity 85.7%; Matches 12; Conservative

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Search completed: August 13, 2003, 14:51:51 Job time: 9.97436 secs

OM protein - protein search, using sw model Run on: August 13, 2003, 14:47:17; Search time (without ali	
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0.5 BLOSUM62 Gapop 10.0 , Gapext 1 AGCKNFYWKGFTSC 14 score: Scoring table: Perfect so Sequence: Searched:

127863 Total number of hits satisfying chosen parameters: 127863 seqs, 47026705 residues

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

SwissProt_41:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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[Tyr7,Gly10] somatostatin Myoxocephalus scorn'

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[TYR7,GLY10]SOMATOSTATIN-14.
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310]. Chem. 262:12692-12699(1987).

FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMAT

SUBCELLULAR LOCATION: Secreted.

MISCELLANEOUS: SOMATOSTATIN II MAY HAVE A DIFFERENT

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Paracanthopterygil;
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Nature 288:137-141(1980)
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16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Somatostatin II precursor [Contains: [Tyr21,Gly24]somatostatin-28;
[Tyr7,Gly10]somatostatin-14].
Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygil; Neopterygil; Teleostei; Euteleostei;
Protacanthopterygil; Salmoniformes; Salmonidae; Oncorhynchus.
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MEDLINE-95354921; PubMed-7628684;
Moore C.A., Kittilson J.D., Dahl S.K., Sheridan M.A.;
"Isolation and characterization of a cDNA encoding for preprosomatostatin containing [Tyr7, Gly10]-somatostatin-14 from preprosomatostatin limitality sendocrinol. 98:253-261(1995).

-I- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN Secreted.
-I- SUBCELLULAR LOCATION: Secreted.
-I- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.

This SWISS-PROT entry is copyright. It is produced through a competween the Swiss Institute of Bioinformatics and the EMBL of the European Bioinformatics Institute. There are no restricting the European Bioinformatics Institute.
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MEDLINE-88029486; PubMed-2889597;
Conlon J.M., Davis M.S., Falkmer S., Thim L.;
"Structural characterization of peptides derived from prosomatostatins I and II isolated from the pancreatic species of teleostean fish: the daddy sculpin and the Eur. J. Blochem. 168:647-652(1987).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; El Actinopterygii; Neopterygii; Teleostei; Euteleostei; Acanthomorpha; Acanthopterygii; Percomorpha; Scorpaen: Cottoidei; Cottidae; Myoxocephalus.
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PubMed-2889597;
M.S., Falkmer S.,
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09YGH4; 09PTU2;

16-OCT-2001 (Rel. 40, Last sequence update)

16-OCT-2001 (Rel. 40, Last annotation update)

20 Somatostatin II precursor [Contains: [Tyr21,Gly24]somatostatin-18]

21 Carassius auratus (Goldfish).

22 Carassius auratus (Goldfish).

23 Carassius auratus (Goldfish).

24 Carassius auratus (Goldfish).

25 Cyprinidae; Carassius.

26 Cyprinidae; Carassius.

27 Cyprinidae; Cypriniformes;

28 Cyprinidae; Cypriniformes;

29 Cyprinidae; Cypriniformes;

20 Cyprinidae; Cypriniformes;

20 Cyprinidae; Cypriniformes;

20 Cyprinidae; Cypriniformes;

21 Contains and characterization of CDNAs encoding preprosomatostatin-19

21 Cloning and characterization of CDNAs encoding preprosomatostatin-19

22 Cloning and characterization of CDNAs encoding preprosomatostatin-19

23 Contains and characterization of CDNAs encoding preprosomatostatin-19

24 Cloning and characterization of CDNAs encoding preprosomatostatin-19

25 Contains and characterization of CDNAs encoding preprosomatostatin-19

26 Contains and characterization of CDNAs encoding preprosomatostatin-19

27 Contains and characterization of CDNAs encoding preprosomatostatin-19

28 Contains and characterization of CDNAs encoding preprosomatostatin-19

28 Contains and characterization of CDNAs encoding preprosomatostatin-19

29 Contains and characterization of CDNAs encoding preprosomatostatin-19

20 Contains and characterization of CDNAs encoding preprosomatostatin-19

21 Contains and characterization of CDNAs encoding preprosomatos
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TISSUE-Liver;
Otto C.J., Peter R.E.;
The expression of SRIF mRNA in the brain of goldfish.";
Submitted (SEP-1997) to the EMBL/GenBank/DDBJ databases.
-!- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
-J- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
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EMBL; AF025686; AAF15306.1; -.

InterPro; IPR004250; Somatostatin.

Pfam; PF03002; Somatostatin; 1.

Cleavage on pair of basic residues; Hormone; Signal; Mult SIGNAL 1 23 POTENTIAL.

PROPEP 24 92 POTENTIAL.

PROPEP 24 92 POTENTIAL.

PROPEP 24 92 POTENTIAL.

PROPEP 24 92 POTENTIAL.

PROPEP 120 [TYR21,GLY24]SOMATOSTATIN-14.

DISULFID 109 120 BY SIMILARITY.

CONFLICT 51 51 Q -> RW (IN REF. 2).

SEQUENCE 120 AA; 13723 MW; 98957D68011A651A CRC64;
                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                           Length
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                                                                                                                 HYDROXYLATION.

DV -> TG (IN REF. 1).

G -> E (IN REF. 1).

5E14605D7B9A46FE CRC64
                                                                        [TYR7, GLY10] SOMATOSTATIN
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Pred. No. 5.2e-07;
); Mismatches 0;
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120 H
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Gaps
                                                    matostatin-14] (Frágment).
loticus (Nile tilapia) (Tilapia nilotica).
azoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthopterygii; Percomorpha; Perciformes; Labroidei
Last sequence update)
Last annotation update)
rsor [Contains: [Tyr21,Gly24]somatostatin-28;
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                                                                                                                                                                                                                                                J.R. Jr., Nielsen P.F., Conlon J.M.; the pancreatic hormones from the Brolications for islet xenograft studies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                [TYR21, GLY24]SOMATOSTATIN-2: [TYR7, GLY10]SOMATOSTATIN-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1: implications for islet xenograft st. Physiol. 111C:33-44(1995).
SOMATOSTATIN INHIBITS THE RELEASE OF
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Biochem. Physici.
FUNCTION: SOMATOSTATIN INHIBIT.
SUBCELLULAR LOCATION: Secreted.
SUBCELLULAR ECATION: THE SOMATOSTATIN FAMILY
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Pred. No. 1.1e-06;
; Mismatches 1;
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Length 14

BY SIMILARITY. D6270F5C09682679 CRC64

14 1640 MW;

86.5%;

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ro; IPR004250; Somatostatin.
PF03002; Somatostatin; 1.
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12; Conser
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A
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DISULFID
SEQUENCE
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Matches
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MEDLINE-89065329; PubMed-2904391;

Conlon J.M., Deacon C.F., Hazon N., Henderson I.W., Thim L.;

Conlon J.M., Deacon C.F., Hazon N., Henderson I.W., Thim L.;

"Somatostatin-related and glucagon-related peptides with unusual structural features from the European eel (Anguilla anguilla).";

Gen. Comp. Endocrinol. 72:181-189(1988).

-1- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.

-1- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.

PIR; A60840; A60840.

R PIR; B60842; B60842.

R PIR; B60842; B60842.

R PIR; B60842; Somatostatin.

R Hormone; Multigene family.

DISULFID

SEQUENCE 14 AA; 1640 MW; D6270F5C09682679 CRC64;
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SMS_ALLMI STANDARD; PRT; 14 AA.

P31885;

01-JUL-1993 (Rel. 26, Created)

01-JUL-1993 (Rel. 26, Last sequence update)

16-OCT-2001 (Rel. 40, Last annotation update)

Somatostatin-14.

Alligator mississippiensis (American alligator), and
Trachemys scripta (Red-eared slider turtle) (Pseudemys scripta (Red-eared slider turtle) (Pseudemys scribtaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteli

Archosauria; Crocodylidae; Alligatorinae; Alligator.

NCBI_TaxID=8496, 34903;
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SPECIES-T.SCripta;
MEDLINE-90341082; PubMed-1974347;
MEDLINE-90341082; PubMed-1974347;
Conlon J.M., Hicks J.W.;
"Isolation and structural characterization of insulin, gl somatostatin from the turtle, Pseudemys scripta.";
Peptides 11:461-466(1990).
-1- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATO:
-1- SUBCELLULAR LOCATION: Secreted.
-1- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
PIR; C60414; C60414.
species of teleostean fish: the daddy sculpin and the Eur. J. Biochem. 168:647-652(1987).
[2]
SEQUENCE.
SPECIES-O.kisutch; TISSUE-Pancreas;
MEDLINE-87055212; PubMed-2877919;
Plisetskaya E.M., Pollock H.G., Rouse J.B., Hamilton J. Kimmel J.R., Andrews P.C., Gorbman A.;
"Characterization of coho salmon (Oncorhynchus kisutch somatostatins.";
Gen. Comp. Endocrinol. 63:252-263(1986).
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SPECIES-A.mississippiensis; TISSUE-Stomach;

MEDLINE-93324451; PubMed-8101369;

Wang Y., Conlon J.M.;

"Neuroendocrine peptides (NPY, GRP, VIP, somatostatin)
and stomach of the alligator.";

Peptides 14:573-579(1993).
[2]
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 85.7%;
Matches 12; Conservative
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          SO CCC REPRESENTATION OF THE PROPERTY OF THE P
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somatostatin-14
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Somatostatin 26; Somatostatin-14]
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Hormone; Multigene
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                                                                                                                                                                                                                                 Vertebrata;
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GS TO THE SOMATOSTATIN FAMILY
Somatostatin.
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:ion update)
Somatostatin-34;
                                                                                                                                                                                                                                              Amiidae;
Pred. No. 4.5e-06; Mismatches 1
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Pred. No. 8.1e-06;
; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOMATOSTATIN-26
SOMATOSTATIN-14
                                                                                                                                                                                                                                Craniata; Amilformes;
                                                                                                                                                                     Last sequence up
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                                                                                                                                                                                                                                                                                                                                                bowfin, Amia
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                                                                                                                                                                                                                                                                                                                                                                                                                                      residues;
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                                                                                                                                                        Created)
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Sukaryota; Metazoa; Chordata;
kctinopterygii; Neopterygii; PiCBI_TaxID=7924;
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2931 MW;
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                                                       1 AGCKNFFWKTFTSC
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|vxinidae; Myxininae;
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EDLINE-94023232
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MEDLINE=86030691; PubMed=2865169;
Schmidt W.E., Mutt V., Kratzin H., Carlquist M., Conlon J.M.
Creutzfeldt W.;
"Isolation and characterization of pross1-32, a peptide derithe N-terminal region of porcine preprosomatostatin.";
FEBS Lett. 192:141-146(1985).
                                                                                                                                                                                                                                                                                                                                        34;
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Conlon J.M., Askensten U., Falkmer S., Thim L.;

*Primary structures of somatostatins from the islet organagish suggest an anomalous pathway of posttranslation of prosomatostatin-1: ";

Endocrinology 122:1855-1859(1988).

-I. FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOSTATIN SOMATOSTATIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-Hypothalamus;
MEDLINE-81054799; PubMed-6107906;
Schally A.V., Huang W.-Y., Chang R.C.C., Arimura A., F Millar R.P., Hunkapiller M.W., Hood L.E.;
"Isolation and structure of pro-somatostatin: a putati precursor from pig hypothalamus.";
Proc. Natl. Acad. Sci. U.S.A. 77:4489-4493(1980).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-JUL-1986 (Rel. 01, Created)
01-OCT-1989 (Rel. 12, Last Sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Somatostatin precursor (Contains: Somatostatin-28; Sor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      $EQUENCE OF 1-64.
MEDLINE=89278131; PubMed=2567292;
Bersani M., Thim L., Baldissera F.G.A., Holst J.J.;
Prosomatostatin 1-64 is a major product of somatostatespression in pancreas and gut.";
expression in pancreas and gut.";
                                                                                                                                                                                                                                                                                                                                       Length
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae;
NCBI_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Intestine;
MEDLINE-80113258; PubMed-7353633;
Pradayrol L., Joernvall H., Mutt V., Ribet A.;
"N-terminally extended somatostatin: the primary
                                                                                                                                                                                                                                                                                                 54FF213AAF424C75
                                                                                                                                                                                                                                                                                                                                    Score 77; DB 1;
Pred. No. 1e-05;
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InterPro; IPR004250; Somatostatin.
Pfam; PF03002; Somatostatin; 1.
Cleavage on pair of basic residues; Hormone.
NON_TER 1 1 34 SOMATOSTATIN-34
PEPTIDE 1 34 SOMATOSTATIN-14
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3963 MW;
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FEBS Lett. 109:55-58(1980)
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rsor [Contains: Somatostatin-14 (SS-14)]
(Channel catfish).
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Ostariophysi;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Usage
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Mismatches 1
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SOMATOSTATIN-14.
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02; Somatostatin; 1.
pair of basic residues; Hormone
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MEDLINE-85303576; PubMed-20011.

Dixon J.E., Andrews P.C.;

"Somatostatins of the channel catfish.";

"Somatostatins of the channel catfish.";
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terygil; Teleostei;
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257:10372-10377(1982)
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Pred.
                                                                                                                                                                                                                                 nitted (SEP-1995) to the EMBL/G
FUNCTION: SOMATOSTATIN INHIBIT
SUBCELLULAR LOCATION: Secreted
SIMILARITY: BELONGS TO THE SOM
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          Schally A.V., Dupont A., Arimure
Linthicum G.L., Schlesinger D.H
"Isolation and structure of some
Biochemistry 15:509-514(1976).
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Cypriniformes;
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Andrews P.C., Dixon J.E.;
Andrews P.C., Dixon J.E.;
Andrews P.C., Dixon J.E.;
Isolation and structure of a peptide hormone predicted from a ml sequence. A second somatostatin from the catfish pancreas.";
J. Biol. Chem. 256:8267-8270(1981).
I. Biol. Chem. 256:8267-8270(1981).
I. SHORTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
I. SUBCELLULAR LOCATION: Secreted.
I. SUBSTEAM TO THE SOMATOSTATIN FAMILY.
I. SUBSTEAM BLONGS TO THE SOMATOSTATIN FAMILY.
I. SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
I. SUBSTEAM BLOINFORMATICS INSTITUTE. There are no restriction the European Bioinformatics Institute of Bioinformatics and the EMBL out the European Bioinformatics Institute. There are no restriction use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for entities requires a license agreement (See http://www.isb-sib.ch).

C. SEQUENCE OF 1892 OF 1892 OF 1892 OF SOMATOTROPIN.

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SMSA_CARAU STANDARD; PRT; 114 AA.

09YGH5;
16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
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"Cloning and characterization of cDNAs encoding preprose and -II from goldfish brain.";

Submitted (NOV-1995) to the EMBL/GenBank/DDBJ databases
-!- FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMA:
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; M25903; AAA49339.1; -.
EMBL; V00607; CAA23877.1; -.
EMBL; V00608; CAA23878.1; -.
PIR; I50798; I50798.
PIR; S00292; RIIDS1.
InterPro; IPR004250; Somatostatin.
Pfam; PF03002; Somatostatin; 1.
Cleavage on pair of basic residues; Hormone; Signal; Multigene family.
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FEE0F2C76F74D99F CRC64
MEDLINE-82082515; PubMed-6171821; Taylor W.L., Collier K.J., Deschenes R.J., Weith H.L. "Sequence analysis of a cDNA coding for a pancreatic somatostatin."; Proc. Natl. Acad. Sci. U.S.A. 78:6694-6698(1981).
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Best Local Similarity 85.7%; Pred. No. 3.2e-05;
Matches 12; Conservative 1; Mismatches 1;
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                                                             1sb-sib.ch/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Comp. Neurol. 410:643-652(1999).
FUNCTION: SOMATOSTATIN INHIBITS THE RELEASE OF SOMATOTROPIN.
SUBCELLULAR LOCATION: Secreted.
SIMILARITY: BELONGS TO THE SOMATOSTATIN FAMILY.
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sor (PSS1) [Contains: Somatostatin-27
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                                                                                                                                                                                                                                                   SOMATOSTATIN-26
SOMATOSTATIN-14.
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a; Metazoa; Chordata; Craniata; Ver
Lepidosireniformes; Protopteridae;
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                       use by non-profit institutions as lo modified and this statement is not remoentities requires a license agreement (or send an email to license@isb-sib.ch)
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                      institutions
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P87384; Q9PS18;
16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
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PIR; JC6166; JC6166.
InterPro; IPR004250; Somatostatin.
Pfam; PF03002; Somatostatin; 1.
Cleavage on pair of basic residues; Hormone; Multigene SIGNAL 1 24 BY SIMILARITY.
PROPEP. 25 99 BY SIMILARITY.
PROPEID 102 115 SOMATOSTATIN-14.
DISULFID 104 115 BY SIMILARITY.
SEQUENCE 115 AA; 12691 MW; 349756FEB4ABE213 CRC64;
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TISSUE-Brain;

MEDLINE-97057290; PubMed-8901629;

TOSTIVINT H., Lihrmann I., Bucharles C., Vieau D., Coufornier A., Conlon J.M., Vaudry H.;

Fournier A., Conlon J., Vaudr
           BOCEF1E603FEAF09 CRC64
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Best Local Similarity 85.7%; Pred. No. 3.2e-05;
Matches 12; Conservative 1; Mismatches 1; Inde
                                                                                                                 Score 77; DB 1; L. Pred. No. 3.2e-05; 1; Mismatches 1;
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Best Local Similarity 85.7%;
Matches 12; Conservative
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SEQUENCE
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-739b-2.rspt

us-09-727

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GenCore version 5.1.6 (c) 1993 - 2003 Compugen Ltd.
                 Copyright
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US-09-727-739B-2 89 1 AGCKNFYWKGFTSC 14	
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258052604 residues 830525 seqs, Searched:

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Minimum DB seq length: 0
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sp_fung1:*
sp_human:*
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# ALIGNMENTS

RESULT

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Gaps
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Ctinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Yprinidae; Carassius.
                                                                                                                                                                                                                                                  ive intestinal peptide-, and granulin-like intestinal extracts of goldfish, Carassius
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                        Mirel. 13, Last sequence update)
Mirel. 19, Last annotation update)
N-11ke peptide.
(Goldfish).
28 AA.
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Pro; IPR004250; Somatostatin.
PF03002; Somatostatin; 1.
ICE 28 AA; 3204 MW; 15D271F677
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                               (TrEMBLrel, 13, TrEMBLrel, 13, TrEMBLrel, 19,
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Uesaka T., ran.
"Somatostatin-, vasoacu-
                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
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                                                                                                                Sukaryota;
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Pfam; PFC
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ö Indels Score 89; DB 13; Pred. No. 6.2e-08; Mismatches 0; ö 100.0%; larity 100.0%; Conservative 1 AGCKNFYWKGFTSC 14 Query Match Best Local Matches ò

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19, (TrEMBLrel. -2001 090Y41; 01-DEC-Q90Y41 RESULT 2. Q90Y41 ID Q90Y AC Q90Y DT 01-D ö

Gaps

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DB 13; 2.5e-07;

CRC64;

databases

Osteoglossomorpha;

2003

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Aug

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DAR REPRESENTATION OCCOS

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Somatostatin cDNAs from several identification and comparative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Actinopterygii; Neopterygii; Teleostei; Osteoglossomorpha;
Osteoglossiformes; Osteoglossidae; Osteoglossum.
NCBI_TaxID=109271;
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annotation update)
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          Actinopterygil; Neopterygil; Teleostei; Osi
Osteoglossiformes; Pantodontidae; Pantodon
NCBI_TaxID=8276;
                                                                                                                                                                                                                                                                           Mismatches
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Teleostei;
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rPro; IPR004250; Somatostat
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ENCE 114 AA; 12352 MW;
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                                                                                      Al-Mahrouki A.A., Irwin D.M., "Characterization of variant osteoglossomorphs: molecular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Al-Mahrouki A.A., Irwin D.M., "Characterization of variant osteoglossomorphs: molecular
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Anguilla japonica (Japanese e
Eukaryota; Metazoa; Chordata;
Actinopterygii; Neopterygii;
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14; Conser
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NCBI_TaxID=7937;
[1]
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01-MAY-2000
01-MAY-2000
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                                                                                                                                      analysis."
Submitted
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Pfam; PF03
                                                                                                                                                                                InterPro;
Pfam; PF03
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                                                                          SEQUENCE
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Best Local
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Q9PRV0;
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Q90Y43
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pha;
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Al-Mahrouki A.A., Irwin D.M., Youson J.H.;

Al-Mahrouki A.A., Irwin D.M., Youson J.H.;

Characterization of variant somatostatin cDNAs from several cateoglossomorphs: molecular identification and comparative analysis.";

L Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.

EMBL; AF292653; AAK97070.1; -..

EMBL; AF292653; AAK97070.1; -..

InterPro; IPR004250; Somatostatin.

R Ffam; PF03002; Somatostatin; 1.

SEQUENCE 114 AA; 12561 MW; 4E3C32F58E34F971 CRC64;
                                                                                                                                  SEQUENCE FROM N.A.

Al-Mahrouki A.A., Irwin D.M., Youson J.H.;
Characterization of variant somatostatin cDNAs from several categories somorphs: molecular identification and comparative analysis.";
Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.

BMBL; AF292652; AAK97069.1; -...
InterPro; IPR004250; Somatostatin.
Ffam; PF03002; Somatostatin; 1.
SEQUENCE 114 AA; 12494 MW; 454DA57A309CA8F2 CRC64;
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Q90742

ID Q90742

AC Q90742;

DT Q1-DEC-2001 (TrEMBLrel. 19, Created)

DT Q1-DEC-2002 (TrEMBLrel. 20, Last sequence update)

DT Q1-MAR-2002 (TrEMBLrel. 20, Last annotation update)

DE Preprosomatostatin.

DE Preprosomatostatin.

OS Pantodon buchholtzi (Butterflyfish).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    090Y40
090Y40
090Y40;
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2001 (TrEMBLrel. 21, Last annotation update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Freprosomatostatin.
Chitala chitala (clown knifefish).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele Actinopterygii; Neopterygii; Teleostei; Osteoglossomorpha, Osteoglossiformes; Notopteridae; Chitala.
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
Preprosomatostatin.
Gnathonemus petersil.
Gnathonemus petersil.
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eul
Actinopterygil; Neopterygil; Teleostel; Osteoglossomory
Osteoglossiformes; Mormyridae; Gnathonemus.
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Pred. No. 2.5e-07;
); Mismatches 0;
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Pred. No. 2.5e-07
0; Mismatches 0
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Euteleostomi;

cDNAs from several

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Length

DB 13; 2.5e-07;

Euteleostom1;
es; Anguillidae;

Vertebrata; Eu Anguilliformes

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Cypriniformes
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                                            the mRNAs
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                                                                                                                                                                                    72E0C3FF6C80650F CRC64;
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00828D35263E8805 CRC64;
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                                          oť
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                                             distribution
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Pred. No. 2.6e-05;
; Mismatches 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Last sequence
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                                                                                                                                                                                                                                                                                     Misma
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                                          toning and precursors
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                                                                                                                                                              02; Somatostatin;
116 AA; 12616 MW;
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ICE 120 AA; 13783 MW;
                                                                                       0:0-0(2001)
AAL13248.1;
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                                                                                                                                                                                                                                     h 86.5%;
Similarity 85.7%;
12; Conservative
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smontanus
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12; Conser
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AF395849; 1
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Eukaryota; Meta:
Actinopterygil;
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Acipenser tran
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Pfam; PF03002,
SEQUENCE
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01-DEC-2001
01-DEC-2001
01-MAR-2002
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                                                                                                                                     InterPro;
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ridae;
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AC 08JHX5
AC 08JHX5
AC 08JHX5;
DT 01-OCT-2002 (TrEMBLrel. 22, Created)
DT 01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT 01-OCT-2002 (TrEMBLrel. 23, Last annotation update)
DT 01-OCT-2002 (TrEMBLrel. 23, Last annotation update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DC CAPTION OF CARNING (TrEMBLREL)
DC CAPTION OF CAPTION 
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Q90XE1;
Q90XE1;
O1-DEC-2001 (TrEMBLrel. 19, Last sequence update)
O1-DEC-2002 (TrEMBLrel. 20, Last annotation update)
Somatostatin.
Acipenser transmontanus (White sturgeon).
Acipenser transmontanus (White sturgeon).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut
                                                                                                                                                                                                                                    Query Match

88.8%; Score 79; DB 13; Length
Best Local Similarity 92.9%; Pred. No. 2.6e-06;
Matches 13; Conservative 0; Mismatches 1; Inde
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Best Local Similarity 85.7%; Pred. No. 2.5e-05;
Matches 12; Conservative 1; Mismatches 1; Inde
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TISSUE=Brain;
Trabucchi M., Tostivint H., Lihrmann I., Sollars C., Va
Dores R.M., Vaudry H.;
Polygenic expression of somatostatin in the sturgeon A
MEDLINE-95053622; PubMed-7525832; Uesaka T., Yano K., Yamasaki M., Nagashima K., Ando M. Somatostatin-related peptides isolated from the eel gion and water absorption across the intestine of the sJ. Exp. Biol. 188:205-216(1994).
InterPro; IPR004250; Somatostatin.
Pfam; PF03002; Somatostatin; 1.
SEQUENCE 25 AA; 2860 MW; BFC672143A04A3F5 CRC64;
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NCBI_TaxID=7904;
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Q8JHX5
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Q90XE1
ID Q90X
AC Q90X
DT Q1-D
DT Q1-D
DT Q1-D
DT Q1-D
OC ACIP
OC ACI
                 RY RT RT BL DR DR DR SO SO
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389682C41252426A CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                   Chordata;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2655 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ., Yamasak
-494(1994)
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                                                                                                Conservative
                                                                                                                                                                                                                                                                           PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                  (TremBLrel
                                                                                                                                 3 CKNFYWKGFTSC
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                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID-9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tted (JUN-2002
AF521016; AAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
8; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Somatostatin
                                                                                                ж
Э
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Eukaryota
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Uesaka
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DT 081UV6;
C 08IUV6;
C 08IUV6;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
OS Homo sapiens (Human).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleost
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
                                                                                                                                                                                                                                                                                                                                                  RESULT 11
Q9DDE4
ID Q9DDE4
FOR CONDEA
ID Q9DDE4

AC Q9DDE4;

DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-OCT-2002 (TrEMBLrel. 12, Last annotation update)
DT 01-OCT-2002 (TrEMBLrel. 12, Last annotation update)
DT 01-OCT-2002 (TrEMBLrel. 16, Last sequence update)
CS MSST OR SOM
OS Brachydanio rerio (Zebrafish) (Danio rerio)
CY Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleo
CC Eukaryota; Metazoa; Chordata; Craniata; Ostariophysi; Cyprinidae; Danio.
CYprinidae; Danio.
CYPTIONE-99425190; Pubmed-10495291;
RX MEDLINE-99425190; Pubmed-10495291;
RX MEDLINE-99425190; Pubmed-10495291;
RX Argenton F., Zecchin B., Bortolussi M.;
RT Zebrafish embryo.";
RX Mech. Dev. 87:217-221(1999)
CR ZFIN; ZDB-GENE-010219-2; smst.
DR ZFIN; ZDB-GENE-010219-3; smst.
                                                                                                                                                 [1]
SEQUENCE FROM N.A.
TISSUE-Brain;
Strausberg R.;
Submitted (NOV-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BC040034; AAH40034.1;
NON_TER 1 1 1
SEQUENCE 122 AA; 13369 MW; A1279CA09CB0CB44 CRC64;
DR InterPro; IPR004250; Somatostatin.
DR Pfam; PF03002; Somatostatin; 1.
SQ SEQUENCE 11:1 AA; 12748 MW; 4E27DB90896A9025 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 67.4%; Score 60; DB 4; Length Best Local Similarity 66.7%; Pred. No. 0.019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 12
Q81UV6
C Q81UV
DT Q81UV
DT Q1-MADT
DT Q1-MADT
DE SIM11
OS HOMO
OC EUKAI
OX NCBI
RN [1]
RR SEQUE
RC TISSU
RA STRAU
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AC 042113;
DT 01-JAN-1998 (TrEMBLrel. 05, Created)
DT 01-JAN-1998 (TrEMBLrel. 05, Last sequence update)
DT 01-JAN-1998 (TrEMBLrel. 22, Last annotation update)
DE P-spondin1.
SPONIA.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 49; DB 13;
Pred. No. 8.2;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match
Best Local Similarity 57.1%;
Matches 8; Conservative
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Search completed: August 13, 2003, 14:52:58 Job time : 22.1795 secs

1 AGCKNFYWKGFTSC 14

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